PRONTOR

FOTOVERSCHLÜSSE

HINWEISE FÜR REPARATURWERKSTÄTTEN

7

GAUTHIER

INSTRUCTIONS FOR REPAIR SHOPS

PHOTOGRAPHIC SHUTTERS

Service Instructions for PRONTOR Shutters
Models: PRONTOR-PRESS I-10p; p1; p2

1. General Introductory Remarks

The purpose of these service instructions is to assist repairmen in handling repairs rapidly, efficiently, reliably and without any appreciable difficulties. The instructions start with a description of the operation of the shutter and it is advisable to read this paragraph carefully, because knowledge of the functions of the individual components is the basis for understanding the co-ordinated operation of all components in the PRONTOR-PRESS shutter.

Notes

a) The PRONTOR-PRESS shutter can only be dismantled after it has previously been removed from the camera.

b) The numbers used in the text are the line item numbers in the spare parts list.

c) A reference to right or left in the service instructions refers to the position shown in the illustrations in the spare parts list.

All parts shown in the spare parts list are shown in the position as assembled in the shutter, so that in case of doubt they can be used as reference.

A) Tools for the Repair

Except for the front plate wrench MV 100 and the lever bending tool A2 there are no other special tools required for dismantling and repairing a shutter.

In selecting the screwdrivers it is important, however, to select the right size for the various screws. Wherever screwdrivers of improper size are used, chances are that the slots in the screws will be damaged.

b) Lubricants

The manufacturer lubricates the shutter by means of special pastes at all positions requiring lubrication and this lubrication can be regarded as a life-time lubrication. In doing repair work lubrication is only necessary where parts have been washed or have been replaced by new ones.

From the attached lubrication diagram it can be seen at what points the shutter components have to be lubricated and what lubricant is to be used.

Note

In lubricating the shutter, lubricants other than those indicated in the lubrication diagram must not be used. Oil or grease must not be used in the shutter. The repairman must see that there will be no accummulation of lubricants on edges, in openings and holes. If necessary, the excessive lubricant must be wiped off.

c) Spare Parts

If in repairing a shutter it is necessary to replace parts, only

factory-made spare parts

should be used. These parts can be ordered by using the attached spare parts list as reference. In this respect it is necessary to indicate the exact designation and the part number given in the spare parts list. This is the only way to insure that the correct replacement parts will be supplied.

2. Mode of Operation

Depending upon the respective exposure time set, the single-action pre-set shutter provided with two cable release sockets 16 and 26 can be opened by use of the cable release socket 16 for a longer or a shorter time interval. On the other hand the cable release socket 26 merely serves to simultaneously open the shutter blades 46 and diaphragm blades 49 for pre-viewing.

a) Opening the Shutter and Diaphragm Blades

By actuating a cable release fitted into the cable release socket 26, the shutter blade ring 45 is rotated by the tripping pin 27 striking the lug 108. With the drive ring 44 held in position by spring action, a rotation of the shutter blade ring 45 causes the shutter blades to open and simultaneously the diaphragm opening rivet 109 displaces the diaphragm lever 111 resting against the diaphragm disc 50 thus opening the diaphragm fully.

When the shutter blade ring 45 returns to its original position, the shutter blades 46 close, the diaphragm lever 111 becomes disengaged and the diaphragm disc 50 is rotated by the action of the diaphragm spring 56 - the diaphragm stops down to the aperture set. The integral cam of the diaphragm index ring 58, against which the diaphragm lever 111 rests, governs the size of the diaphragm opening (aperture).

b) Instantaneous Speeds

When actuating the shutter by means of the cable release socket 16, the release lever 24 is displaced so that the long locking rivet moves in front of the locking lug 110 of the shutter blade ring 45 and holds the latter in position, while the cocking latch 102 in positive engagement with the tripping lever initiates the shutter cycle.

The cocking latch 102 strikes the downward lug of the driving lever 35 and displaces this lever radially toward the rim of the shutter, while the braking latch 104 is moved toward the nozzle.

The driving latch 103 in positive engagement with the driving lever 35 is pressed against the ring lever 29 and a recess of this latch accepts the driving rivet of the ring lever. Before the cocking latch 102 disengages the driving lever 35, the latter strikes the star-shaped locking lever 31b, moves this lever toward the wall of the housing and disengages the ring lever 29 so far locked in position.

After the driving lever 35 has become disengaged by the cocking latch 102, it is displaced by the action of the driving spring 36 toward the nozzle. Simultaneously the driving ring 44 is displaced by the ring lever 29 in engagement with the latter and the shutter blades open. The rest of the shutter cycle is delayed by the braking latch 104 resting against the brake lever 40, until this latch has displaced the brake lever 40 and is permitted to slip past (please also see speed setting system). At the same time the ring lever 29 and the driving ring 44 connected to the latter are returned to their starting positions by the driving latch 103 and the action of the driving spring 31 - the shutter blades 46 close.

c) Setting B

When the shutter is set to "B", the B lever 10, a lug of which rests against the setting ring 3, is disengaged, so that it comes to rest against the long locking rivet of the release lever 24. When the shutter complets its cycle, the B lever 10 moves toward the nozzle and locks the drive ring at the moment of the maximum opening of the shutter blades.

When the pressure on the tripping pin is eased off, the release lever 24 returns to its original position carrying along the B lever 10; the drive ring 44 becomes disengaged and the shutter blades 46 close.

3. Dismantling and Re-assembling the Shutter

a) Dismantling the Shutter

After removing the four fixing screws 51;55 of the bottom 57, this part can be lifted off together with the diaphragm assembly. (For further details please see diaphragm system).

The shutter mechanism is now accessible. The shutter blades 46 can be lifted off directly, the shutter blade ring spring 22 can be unhooked and the shutter blade ring 45 and the drive ring 44 can be removed. The removal of the other parts is relatively simple and only where it is deemed necessary are detailed instructions given in the descriptions of the individual systems.

Note

Should it be necessary to replace the front plate 2, the setting ring 3 or the click-stop spring 4, the front plate ring 1 must first be unscrewed by use of the front plate retaining ring wrench MV 100.

b) Re-assembling the Shutter

Note

In general the repairman has to see to it that in re-assembling the shutter no levers are bent out of position and no springs are stretched, as otherwise there will be no assurance of a proper shutter function. Particular attention must be given to the position of the tripping pin 27, as this part becomes disengaged when the shutter blade ring 45 is removed from the shutter and may slip out of

the drilled hole of the cable release socket. The driving spring 36 must be hooked onto the spring rivet 105 of the adjusting lever 38.

Detailed instructions on how to re-assemble the shutter are given in the descriptions of the individual systems.

4. Cocking and Tripping System

The function of the cocking and tripping system has already been described in section 2. The following section contains instructions on how to replace parts, on the assembly and on the correction of defects.

a) Replacing Parts

In order to remove the release lever 24 together with the cocking latch 102, the B lever 10 and the bearing bridge 20 have to first be removed. To facilitate the work in re-assembling the shutter, we also recommend the removal of the driving lever 35.

b) Re-assembling the Release Lever 24

Fit the cocking latch spring 21 on the bushing in such a manner that the long spring arm rests against the nozzle and the short arm against the wall of the housing. Place the release lever 24 into the bearing hole provided in the housing, place one arm of the tripping spring 23 against the nozzle and the other arm against the short rivet of the release lever 24, fit on the bearing bridge 20 and screw it in position. Use a pair of pincers to pull the cocking latch spring 21 toward the wall of the housing, lift it a little bit and place it against the spring rivet of the cocking latch 102.

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PHOTOGRAPHIC SHUTTERS

Defect	Cause of the Defect	Correction
1. Shutter does not trip.	1. Release lever spring 23 does not press the release lever 24 against the tripping pin 17.	1. Fit in the release lever spring 23 as described under 4b, so that the release lever 24 is pressed against the tripping pin 17.
	2. Cocking latch 102 does not strike the lug of the driving lever 35.	2a. Fit in the cocking latch spring 21 as described under 4b, so that the cocking latch 102 is pressed against the nozzle.
		2b. Bend the supporting lug of the cocking latch 102 in such a manner that the driving lever 35 is displaced and becomes disengaged in the cocking position.
	3. Ring lever 29 does not engage the driving latch 103.	3. Place one arm of the driving latch spring 32 against the spring rivet for the driving spring 36 and insert the other one into the spring hole provided in the driving latch.

5. Slow Speed Assembly and Speed Setting System

Rotating the setting ring 3 controls both the engagement of the brake lever 40 and the engagement and disengagement of the escapement. When the shutter is set for either of the speeds 1, 1/2, 1/4 and 1/8 sec. the escapement is in engagement, whereas the other shutter speeds are controlled by the relative position of the brake lever 40 and the resultant retarding action exerted by the slow speed assembly 8.

After removal of the brake lever 40 and after unscrewing the fixing screws 6 + 7, the slow speed assembly can be removed from the shutter.

Installing the Slow Speed Assembly

Rotate the setting ring 3 to the 1 sec. position, fit in the slow speed assembly 8 and screw it in position. Slip the draw lever of the brake lever 40 on the stud of the gear segment, place the washer 41 on the threaded hole, slide the brake lever 40 over it and screw it in position. After the brake spring 101 is hooked up on the rivet of the gear segment and on the brake lever screw 39, the slow speed assembly 8 is ready for operation.

Note

When assembling the setting ring 3, the repairman has to see to it that the escapement rocker arm and the control rivet of the gear segment, which project through the bottom of the housing, are accepted in the recesses provided in the setting ring 3.

Defect	Cause of the Defect	Correction
1. When set for slower speeds the shutter completes its cycle without any retarding action exerted by the slow speed assembly.	1. The brake lever 40 is not in engagement; brake spring 101 is unhooked.	1. Hook up brake spring 101.
2. The shutter speeds are slower than indicated by the relative positions of the speed setting ring.	2a. Brake lever 40 does not move easily; washer 41 has been forgotten.	2a. Remove brake lever 40 and re-install it together with the washer 41.
	2b. Slow speed assembly is dirty.	2b. Replace slow speed assembly.

Adjusting the Shutter Speeds

The shutter speeds can be adjusted by swaging or filing the control cam of the speed setting ring 3.

6. Shutter Blade System

Assembly Instructions

The red mark on the setting ring 3 must be set to "B". Slide the drive ring 44 with the recess under the ring lever 29 in such a manner that its rivet will get into the proper place and the drive ring 44 will be seated on the nozzle. In doing so attention must be given that the lug of the slow speed assembly 106 will rest against the rivet of the escapement rocker arm and that when the drive ring 44 is rotated the

contact arm 107 presses the contact spring 100 against the flash contact pin (please see flash contact system).

Use a pair of pincers to seize the drive ring spring 31 and place it against the spring rivet of the drive ring 4.

Before the shutter blade ring 45 is fitted in position, the spring 22 of the shutter blade ring must be hooked up on the opening lug 108 and verify that the tripping pin is in the cable release socket. Rotate the shutter blade ring 45 in such a manner that the opening lug 108 will be in front of the tripping pin and place it on the nozzle. For mounting the shutter blades 46 the shutter must be set to "B", opened and arrested in that position. The shutter blades are now fitted clockwise. With the diaphragm fully opened, the bottom 57 must be aligned with the drilled holes for the fixing screws in the housing, placed in position and secured by means of four screws 51;55.

Defect	Cause of the Defect	Correction
1. Shutter blades do not close.	1a. Shutter blade ring spring 22 has not been hooked up.	1a. Hook up the shutter blade ring spring 22.
	1b. The drive ring spring 31 is not placed against the drive ring.	1b. Place the drive ring spring 31 against the drive ring.
2. Shutter blades do not open for preview control.	2. Tripping pin 27 is missing, or not in the cable release socket 26.	2. Fit in the tripping pin 27.

Note

Shutter blades 46 and diaphragm blades 49 must be treated with particular care. Bent parts must be replaced by new ones. Shutter blades and diaphragm blades must be protected from fingerprints which tend to cause corrosion. In general, parts that are not in perfect working condition should be replaced by new ones and only in such cases where replacement parts are not available, the shutter and diaphragm blades should be placed on a flat surface to wipe off the fingerprints by use of a clean cloth.

Oil or grease should never be used neither on the shutter blades nor on the diaphragm blades.

7. Diaphragm System

After unscrewing the three fixing screws 47, the diaphragm covering disc 48, the diaphragm blades 49 and the diaphragm disc 50 can be lifted off from the bottom. The diaphragm index ring 58 carried on a shoulder of the bottom 57 is secured in position by use of the heads of the retaining screws 52.

Re-assembly

The bottom 57 must be placed on the worktable as shown in the spare parts list. In fitting the diaphragm disc 50 the repairman has to see to it that the two rivets come to rest in the two recesses provided in the bottom 57 and that the diaphragm opening lever will be to the left of the rivet. Fit on the diaphragm blades 49 in a counterclockwise direction so that their edges will be aligned with the outside edge of the diaphragm disc, place the flat spring into the slot provided for this spring in the bottom, fit on the diaphragm covering disc 48 in the position shown in the spare parts list and rotate it slightly so that the rivets will come to rest

in the holes. This can more easily be done by use of a pair of pincers or a scriber. Align the diaphragm covering disc 48 with the screw holes and secure it by means of the three screws 47.

Fit the diaphragm spring 56 on the bearing rivet, place the long arm against the rivet of the diaphragm disc and the short arm against the bottom rivet.

The diaphragm blades 49 and the diaphragm disc 50 must move so easily that they can be moved by the action of the diaphragm spring.

8. Flash Contact System

The shutter is X synchronized, i. e. the contact is closed at the position when the shutter blades in opening have to travel another 1.5 to 2 mm to clear the aperture. When the shutter completes its cycle, the contact arm 107 of the drive ring 44 presses the contact spring 100 against the flash contact pin riveted into the wall of the housing and forms a live connection.

Defect	Cause of the Defect	Correction
1. Although the flash equipment is in proper working condition, the flash is not fired.	1a. The contact is not closed, as the contact arm 107 of the drive ring 44 is bent out of position.	1a. Adjust the contact arm 107 or replace the drive ring 44.

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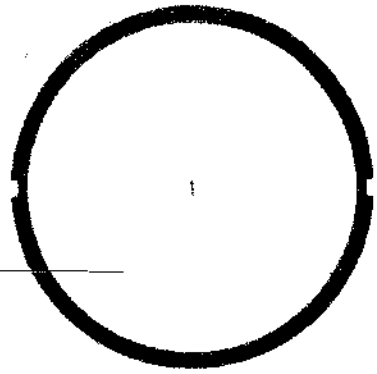
Defect	Cause of the Defect	Correction
	1b. Drive ring 44 is not properly fitted into position; contact arm 107 is located between the contact spring 100 and the flash contact pin.	1b. Fit in the drive ring 44 in such a manner that the contact arm 107 in being displaced presses the contact spring 100 against the flash contact pin.
2. Contact making does not occur at the proper position of the opening travel of the shutter blades.	2. Contact arm 107 is bent out of position.	2. See 1a.

Ersatzteilliste

Grundmodell I-10

PRONTOR - PRESS

Ersatzteilliste	Gefertigt 9. 3.65 fe.	
PRONTOR - PRESS I - 10	Geprüft	Blatt Nr. 2



1

2

3

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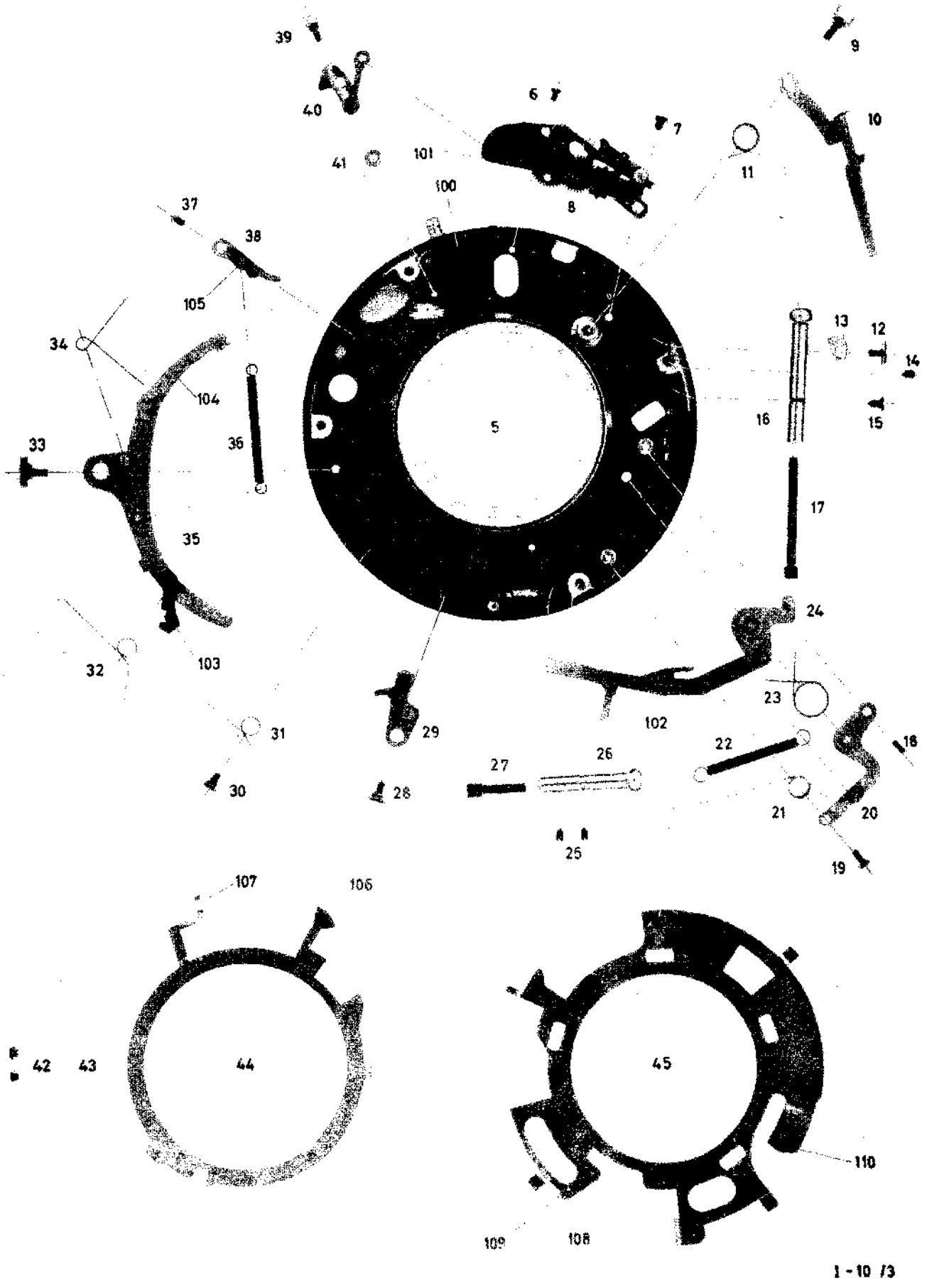
4

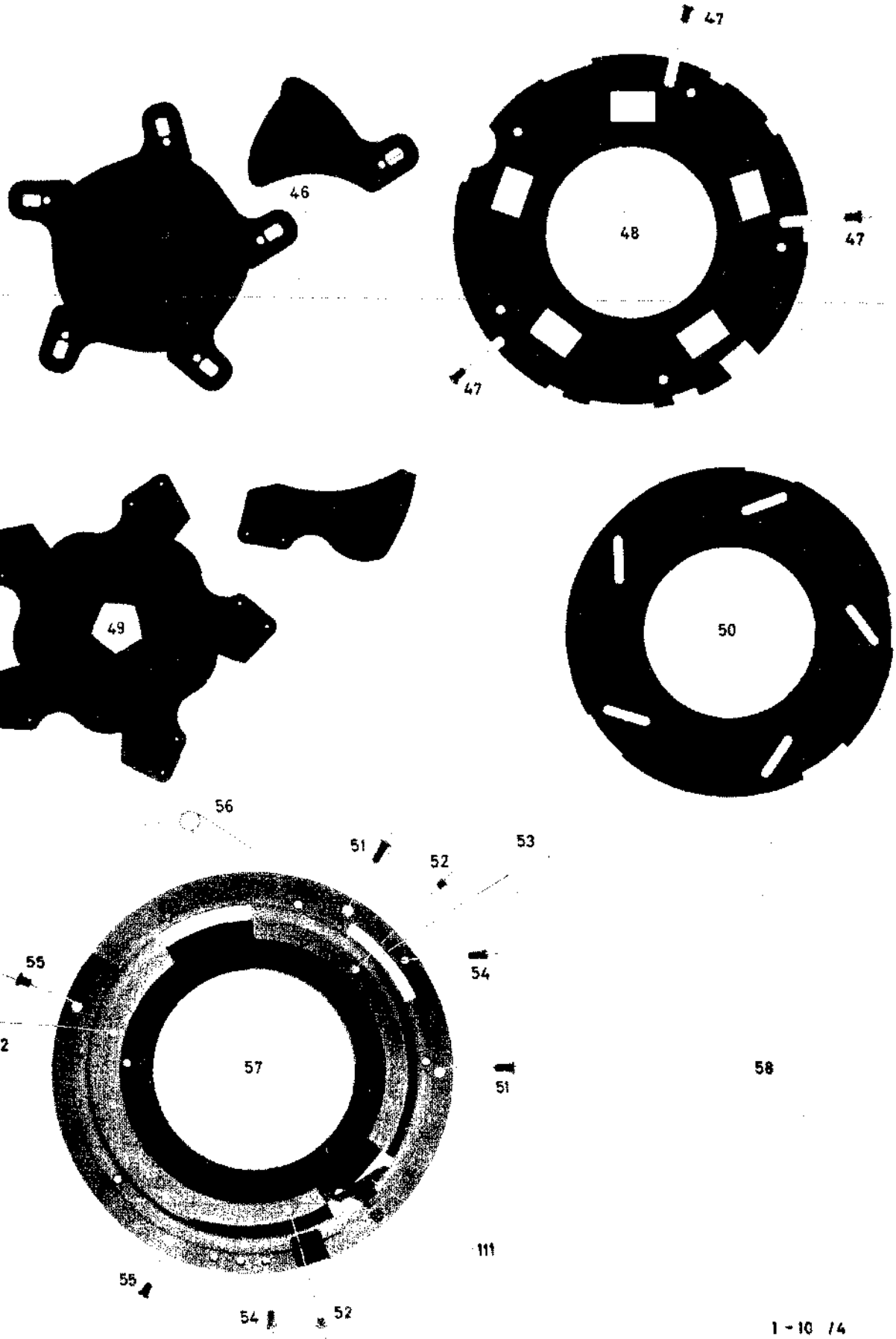
1 - 10 /2

Ersatzteilliste	Gefertigt 9.3.65 fe	
PRONTOR - PRESS I - 10	Geprüft	Blatt Nr. 3



1 - 10 /3

Ersatzteilliste	Gefertigt 9. 3. 65 fe.	
PRONTOR - PRESS I - 10	Geprüft	Blatt Nr. 4



1 - 10 /4

Ersatzteilliste

PRONTOR - PRESS I - 10

Gefertigt 9. 3. 65 fe.

Geprüft

Blatt Nr. 5

Pos.	Teil – Nr.	Stück	Benennung
1	IJRX5p - 239.1	1	Frontplattenring front plate ring
2	I - 10 - 143	1	Frontplatte — ohne Bild front plate — without illustration
3	I - 10 - 137	1	Einstellring — ohne Bild speed setting ring — without illustration
4	0376y - 362	1	Rastenfeder notch spring
5	I - 10 - U 1	1	Kapsel — wird nicht abgegeben housing — cannot be supplied
6	7 000 884	1	Hemmwerkschraube screw for slow speed assembly
7	7 002 002	1	Hemmwerkschraube screw for slow speed assembly
8	I - 12 - G 20	1	Hemmwerk — wird nur als Ganzes abgegeben slow speed assembly — only complete unit can be supplied
9	7 002 787	1	Zeithebellagerschraube B - lever bearing screw
10	I - 10 - 119	1	Zeithebel B - lever
11	I - 10 - 121	1	Zeithebelfeder B - lever spring
12	7 002 139	1	Sektorenringschraube shutter blade ring screw
13	IJRX5p3 - 127	1	Anschlagplatte stop plate
14	IJRX5p - 73	1	Gewindestift threaded pin
15	7 002 977	1	Auslösrohrschraube cable release socket screw
16	I - 12 - 123.1	1	Auslösrohr " A " cable release socket " A "
17	I - 12 - U124	1	Auslösstift cable release socket pin
18	7 000 985	1	Lagerbrückenschraube bearing bridge screw
19	7 002 228	1	Lagerbrückenschraube bearing bridge screw

Ersatzteilliste	Gefertigt 9. 3. 65 fe.	
PRONTOR - PRESS I - 10	Geprüft	Blatt Nr. 6

Pos.	Teil – Nr.	Stück	Benennung
20	I - 10 - U361	1	Lagerbrücke bearing bridge
21	I - 10 - 682	1	Spannklinkenfeder cocking latch spring
22	IJRX5p - 133	1	Sektorenringfeder shutter blade ring spring
23	I - 10 - 130	1	Auslöserfeder release spring
24	I - 10 - U 85	1	Auslöser release
25	IJRX5p - 75	2	Gewindestift threaded pin
26	IJRX5q - 72a	1	Auslösrohr " B " cable release socket " B "
27	IJRX5p - 74a	1	Auslösstift " B " cable release socket pin " B "
28	7 002 294	1	Ringhebelschraube ring lever screw
29	I - 12 - U 67	1	Ringhebel ring lever
30	7 002 457	1	Zuziehfederschraube closing spring screw
31	IJRX5 - 107	1	Antriebringfeder drive ring spring
32	IJRX5 - 70	1	Treibklinkenfeder driving latch spring
33	OJR10 - 102,1	1	Treibhebelschraube drive lever screw
34	JRI - 64	1	Bremsklinkenfeder brake latch spring
35	IJRX5p - U 63	1	Treibhebel drive lever
36	IJRX5 - 103	1	Treibfeder drive spring
37	7 001 416	1	Regulierhebelschraube adjusting lever screw
38	IJRX5 - U 45	1	Regulierhebel adjusting lever

Ersatzteilliste	Gefertigt 9. 3. 65 fe.	
PRONTOR-PRESS I-10	Geprüft	Blatt Nr. 7

Pos.	Teil – Nr.	Stück	Benennung
39	3114-20-3220	1	Bremshebelschraube brake lever screw
40	IJRX5 - U 34,1	1	Bremshebel brake lever
41	OJRX5 - 78	1	Unterlegscheibe für Bremshebel washer for brake lever
42	7 000 073	2	Einstellbogenschraube scale band screw
43	I - 10 - 134	1	Einstellbogen ohne Bild scale band without illustration
44	I - 10 - U 80	1	Antriebring drive ring
45	I - 10 - U685	1	Sektorenring shutter blade ring
46	IJRX5 - 61	5	Sektor shutter blade
47	7 002 941	3	Irisdeckscheibenschraube diaphragm covering disc screw
48	I - 10 - 10	1	Irisdeckscheibe diaphragm covering disc
49	I - 10 - U 5	5	Blendensektor diaphragm shutter blade
50	I - 10 - U 8	1	Irisscheibe diaphragm disc
51	7 001 428	2	Bodenschraube bottom screw
52	7 001 431	3	Halteschraube für Iriszeigerring holding screw for diaphragm pointer ring
53	I - 10 - 13	1	Friktionsfeder friction spring
54	7 002 876	2	Anschlagschraube für Iriszeigerring stop screw for diaphragm pointer ring
55	7 002 002	2	Bodenschraube bottom screw
56	I - 10 - 766	1	Blendenfeder diaphragm spring
57	I - 10 - U 2	1	Boden wird nicht abgegeben bottom cannot be supplied

Ersatzteilliste	Gefertigt 9. 3. 65 fe
PRONTOR - PRESS I-10	Geprüft / Blatt Nr. 8

Pos.	Teil – Nr.	Stück	Benennung
58	I - 10 - 7	1	Iriszeigerring / diaphragm pointer ring — ohne Bild / without illustration
			Die Positionszahlen über 100 beziehen sich auf den Text der Reparatur - Hinweise / The index numbers above 100 refer to the text of the " Instructions for Repair Shops"

Ersatzteilliste

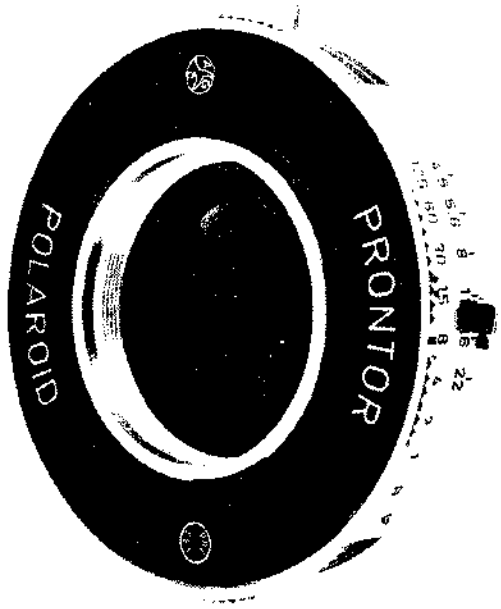
PRONTOR-PRESS 1-10p

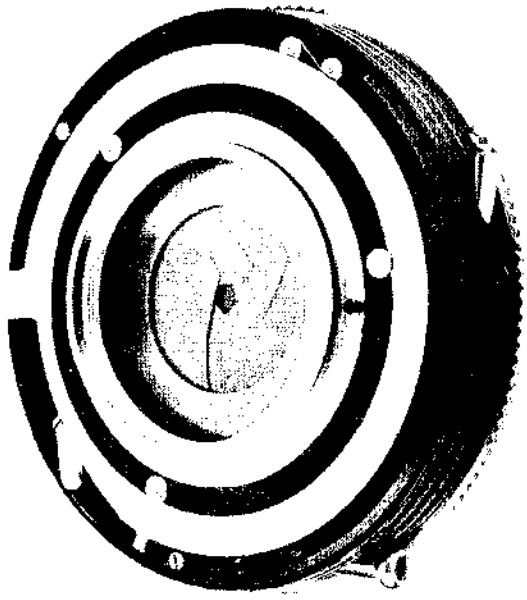
Fa. Polaroid USA

Kamera :

Optik/Lens: Ysaron 1:4,5 / 75

Liste best. aus Blatt 1 - 4	
Anz. der Änd. Bl.	
Gefertigt 9. 3. 65	Blatt Nr. 1
Geprüft	





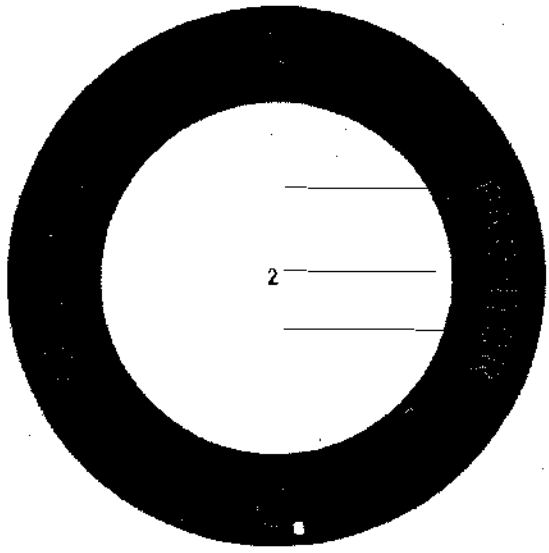
Ersatzteilliste

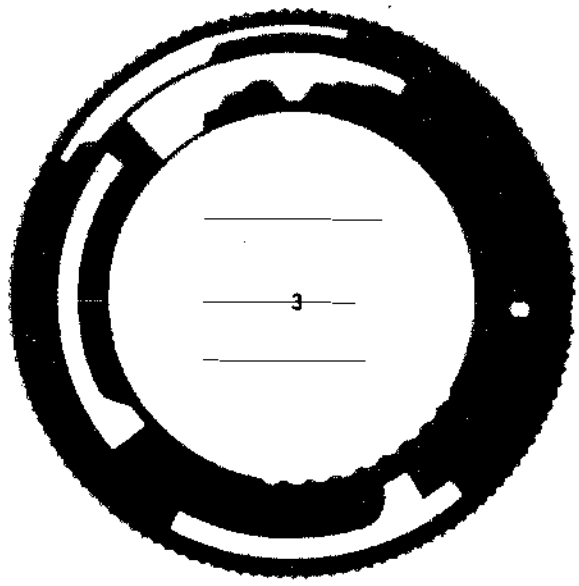
PRONTOR - PRESS I - 10 p

Gefertigt 9. 3. 65 fe.

Geprüft

Blatt Nr. 2





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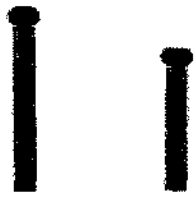
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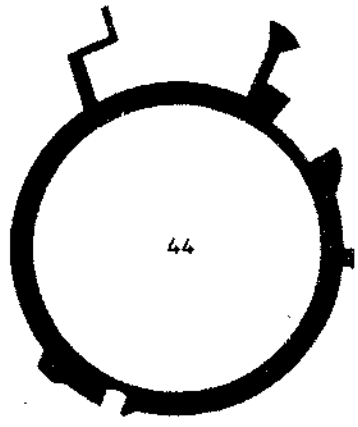
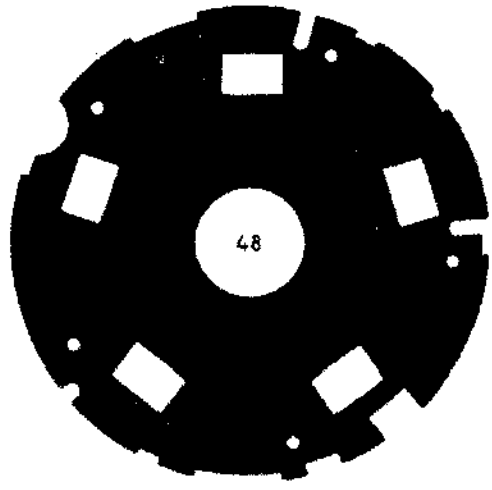

44

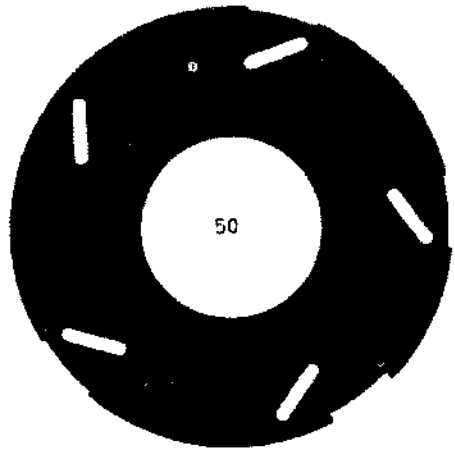
43

46

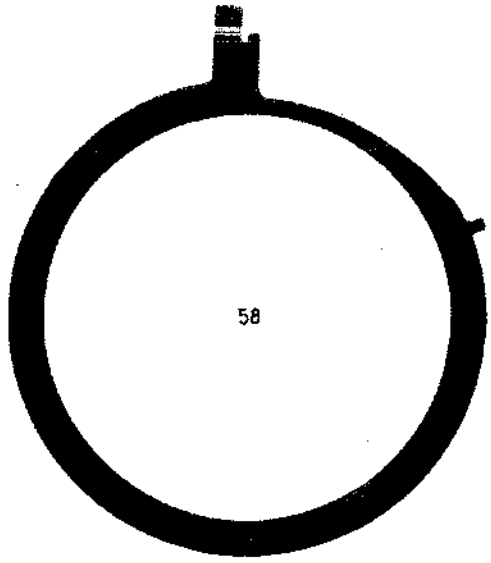

48

I - 10p /2

Ersatzteilliste	Gefertigt 9. 3.65 fe.	
PRONTOR - PRESS I -10p	Geprüft	Blatt Nr. 3



50a



Ersatzteilliste

PRONTOR – PRESS I - 10p

Gefertigt 9.3.65 fe

Geprüft

Blatt Nr. 4

Pos.	Teil – Nr.	Stück	Benennung
2	I - 10p - 143	1	Frontplatte / front plate — an Stelle von I - 10 - 143 / inst. of I - 10 - 143
3	I - 10p - 137	1	Einstellring / speed setting ring — an Stelle von I - 10 - 137 / inst. of I - 10 - 137
5	I - 10p - U 1	1	Kapsel / housing — ohne Bild / without illustration — wird nicht abgegeben / cannot be supplied — an Stelle von I - 10 - U1 / inst. of I - 10 - U1
12	7 002 445	1	Sektorenringschraube / shutter blade ring screw — an Stelle von 7 002 139 / inst. of 7 002 139
16	I - 12p - 123	1	Auslösrohr " A " / cable release socket " A " — an Stelle von I - 12 - 123.1 / inst. of I - 12 - 123.1
26	IJRX5p - 72a	1	Auslösrohr " B " / cable release socket " B " — an Stelle von IJRX5q - 72a / inst. of IJRX5q - 72a
43	I - 10p - 134	1	Einstellbogen / scale band — an Stelle von I - 10 - 134 / inst. of I - 10 - 134
44	I - 10p - U 80	1	Antriebring / drive ring — an Stelle von I - 10 - U 80 / inst. of I - 10 - U 80
46	IJRX5p - 61	5	Sektor / shutter blade — an Stelle von IJRX5 - 61 / inst. of IJRX5 - 61
48	I - 10p - 10	1	Irisdeckscheibe / diaphragm covering disc — an Stelle von I - 10 - 10 / inst. of I - 10 - 10
50	I - 10p - U 8	1	Irisscheibe / diaphragm disc — an Stelle von I - 10 - U 8 / inst. of I - 10 - U 8
50a	7 002 953	1	Fixierschraube / locating screw
57	I - 10p - U 2	1	Boden / bottom — ohne Bild / without illustration — wird nicht abgegeben / cannot be supplied — an Stelle von I - 10 - U2 / inst. of I - 10 - U2
58	I - 10p - 7	1	Iriszeigerring / diaphragm pointer ring — an Stelle von I - 10 - 7 / inst. of I - 10 - 7
59	IJRX5p - 164	1	Anschraubring / flange
		-	Die übrigen Teile nach Grundmodell I - 10 / The remaining parts as per basic model I - 10

Ersatzteilliste

PRONTOR - PRESS I-10p1

Fa. Polaroid USA

Kamera :

Optik/Lens: Ysaron 1:4,5 / 105

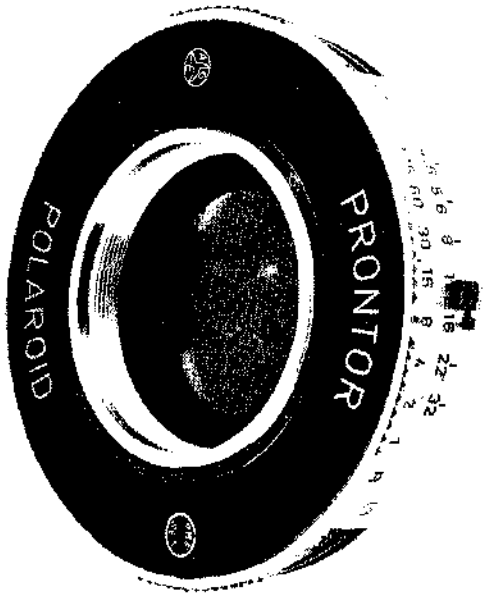
Liste best. aus Blatt 1 - 4

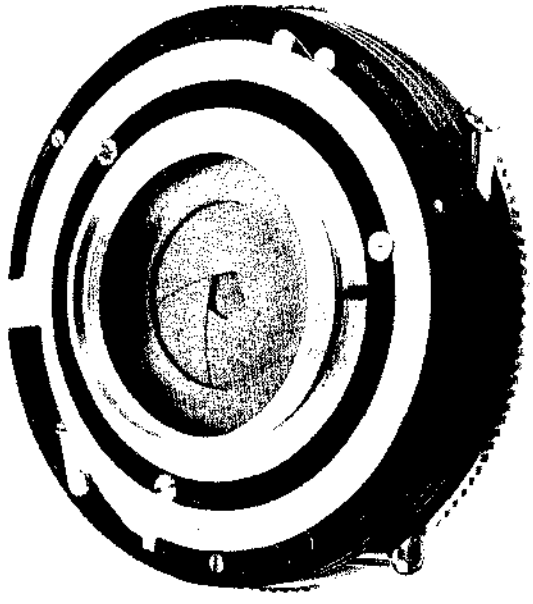
Anz. der Änd. Bl.

Gefertigt 9. 3. 65 fe.

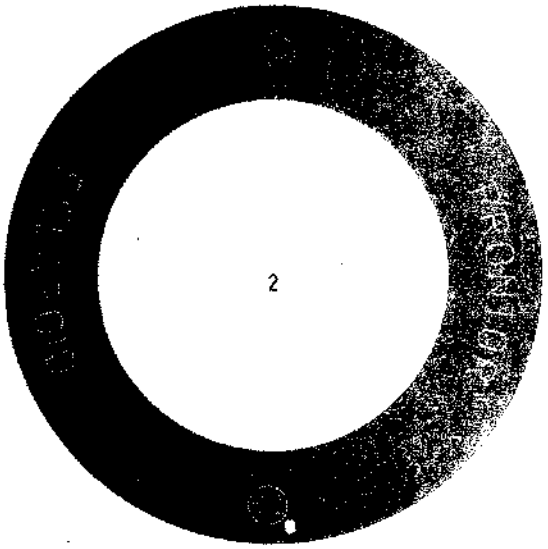
Geprüft

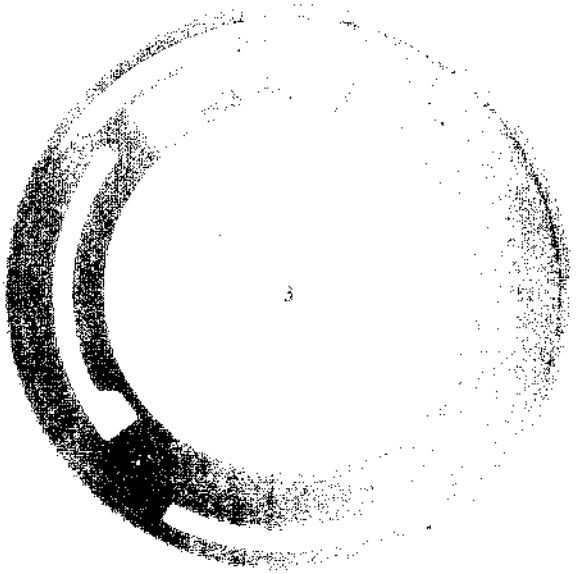
Blatt Nr. 1





Ersatzteilliste	Gefertigt 9. 3. 65 fe	
PRONTOR - PRESS I - 10 p1	Geprüft	Blatt Nr. 2





12

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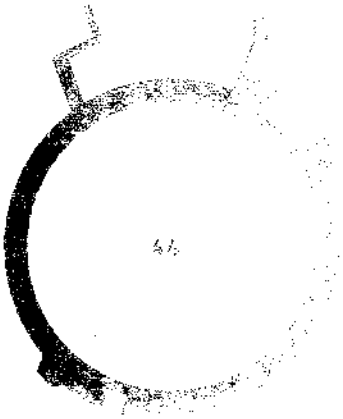
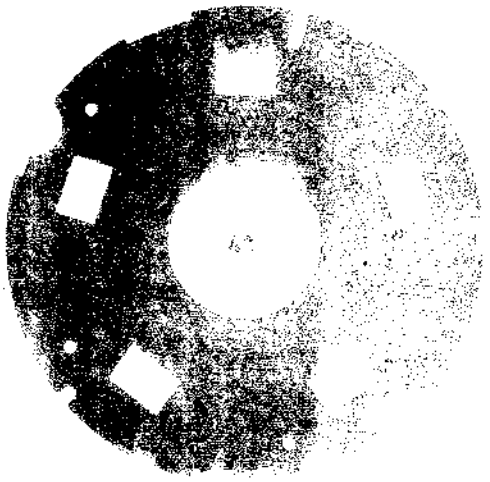


43

46



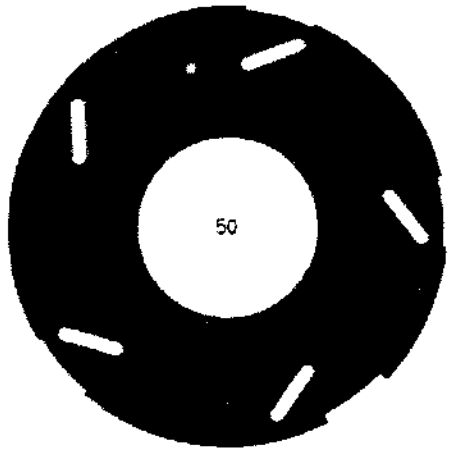
Ersatzteilliste

PRONTOR - PRESS I - 10 p1

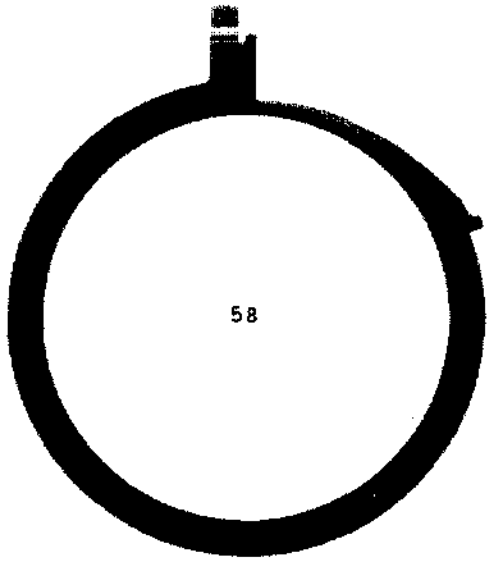
Gefertigt 9. 3. 65 fe

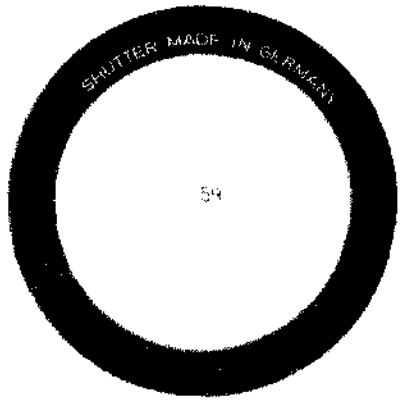
Geprüft

Blatt Nr. 3



50a





Ersatzteilliste

PRONTOR - PRESS I-10 p1

Gefertigt 9. 3.65 fe

Geprüft

Blatt Nr. 4

Pos.	Teil – Nr.	Stück	Benennung	
2	I - 10p - 143	1	Frontplatte front plate	an Stelle von I - 10 - 143 inst. of I - 10 - 143
3	I - 10p - 137	1	Einstellring speed setting ring	an Stelle von I - 10 - 137 inst. of I - 10 - 137
5	I - 10p - U 1	1	Kapsel ohne Bild housing without illustration	wird nicht abgegeben cannot be supplied an Stelle von I - 10 - U1 inst. of I - 10 - U1
12	7 002 445	1	Sektorenringschraube shutter blade ring screw	an Stelle von 7 002 139 inst. of 7 002 139
16	I - 12p - 123	1	Auslösrohr " A " cable release socket " A "	an Stelle von I - 12 - 123.1 inst. of I - 12 - 123.1
26	IJRX5p - 72a	1	Auslösrohr " B " cable release socket " B "	an Stelle von IJRX5q - 72a inst. of IJRX5q - 72a
43	I - 10p1 - 134	1	Einstellbogen scale band	an Stelle von I - 10 - 134 inst. of I - 10 - 134
44	I - 10p - U 80	1	Antriebring drive ring	an Stelle von I - 10 - U 80 inst. of I - 10 - U 80
46	IJRX5p - 61	5	Sektor shutter blade	an Stelle von IJRX5 - 61 inst. of IJRX5 - 61
48	I - 10p1 - 10	1	Irisdeckscheibe diaphragm covering disc	an Stelle von I - 10 - 10 inst. of I - 10 - 10
50	I - 10p - U 8	1	Irisscheibe diaphragm disc	an Stelle von I - 10 - U 8 inst. of I - 10 - U 8
50a	7 002 953	1	Fixierschraube locating screw	
57	I - 10p - U 2	1	Boden ohne Bild bottom without illustration	wird nicht abgegeben cannot be supplied an Stelle von I - 10 - U2 inst. of I - 10 - U2
58	I - 10p1 - 7	1	Iriszeigerring diaphragm pointer ring	an Stelle von I - 10 - 7 inst. of I - 10 - 7
59	IJRX5p - 164	1	Anschraubring flange	
			Die übrigen Teile nach Grundmodell I - 10 The remaining parts as per basic model I - 10	

Ersatzteilliste

PRONTOR-PRESS 1-10p2

Fa. Polaroid USA

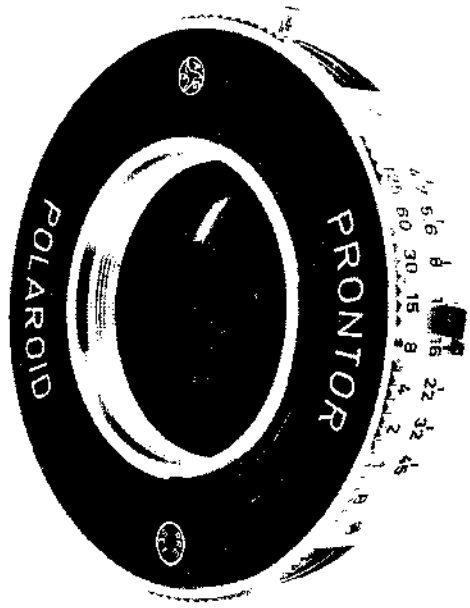
Kamera :

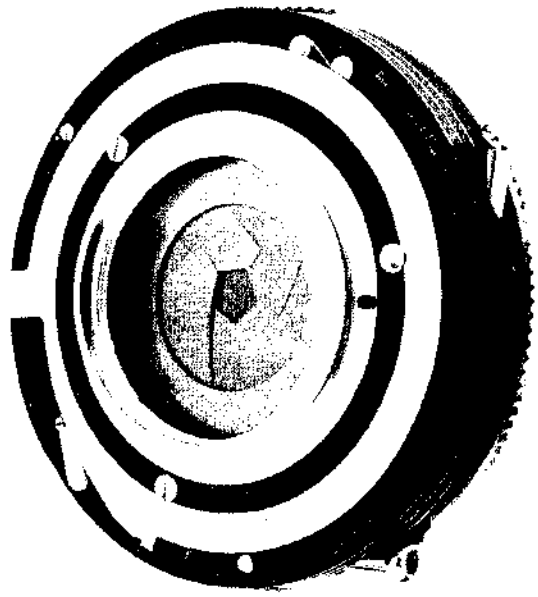
Optik/Lens: Ysarex 1:4,7 /127

Liste best. aus Blatt 1 - 4
Anz. der Änd. Bl.

Gefertigt 9. 3. 65 fe.
Geprüft

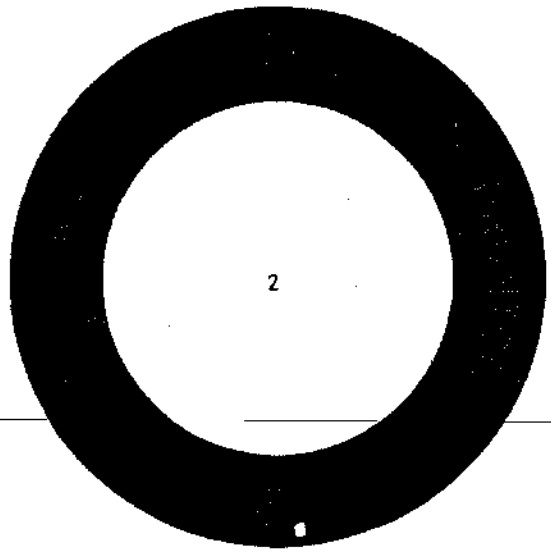
Blatt Nr. 1



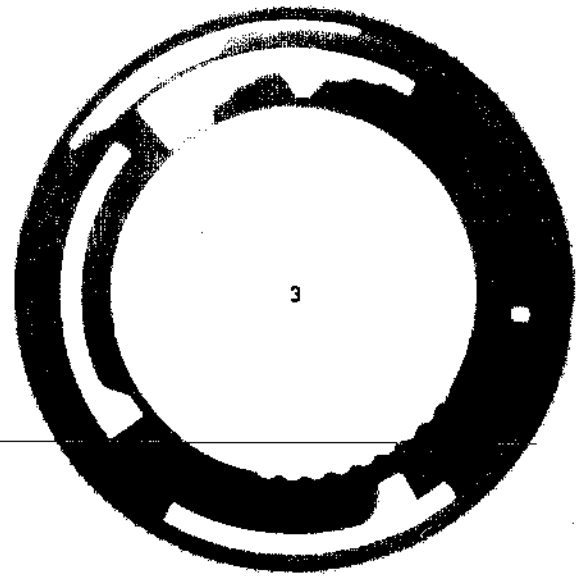


Ersatzteilliste	Gefertigt 9. 3. 65
PRONTOR-PRESS 1-10 p2	Geprüft

Blatt Nr. 2



2



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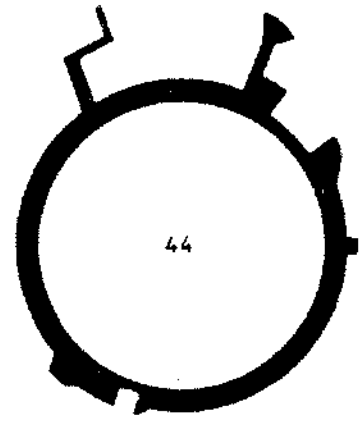

44

43

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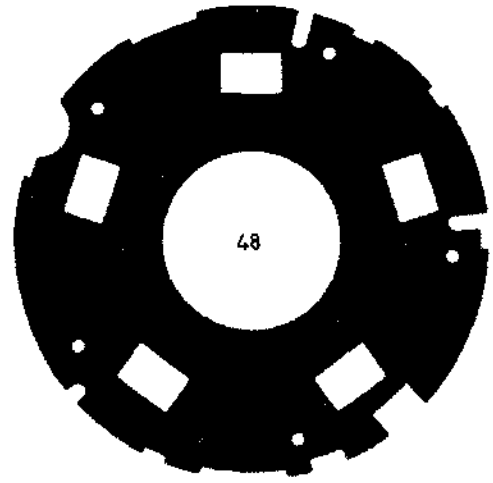
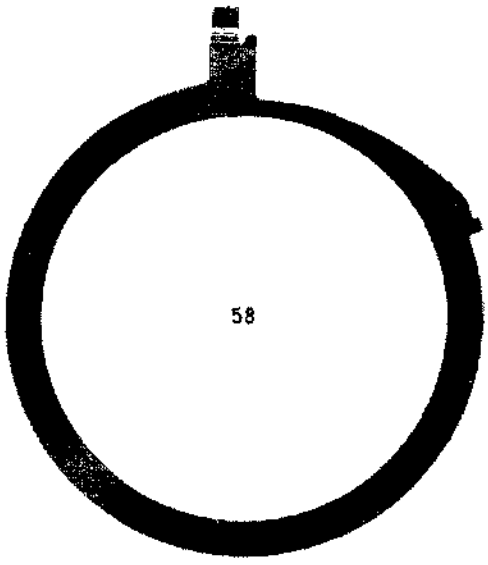
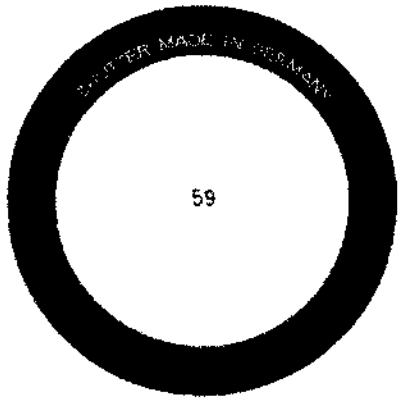


48

1 - 10p2 /2

50a





Ersatzteilliste

PRONTOR-PRESS I-10 p2

Gefertigt 9.3.65 fe.

Geprüft

Blatt Nr. 4

Pos.	Teil – Nr.	Stück	Benennung
2	I - 10p - 143	1	Frontplatte front plate an Stelle von I - 10 - 143 inst. of I - 10 - 143
3	I - 10p - 137	1	Einstellring speed setting ring an Stelle von I - 10 - 137 inst. of I - 10 - 137
5	I - 10p - U 1	1	Kapsel ohne Bild wird nicht abgegeben an Stelle von I - 10 - U 1 housing without illustration cannot be supplied inst. of I - 10 - U 1
12	7 002 445	1	Sektorenringschraube shutter blade ring screw an Stelle von 7 002 139 inst. of 7 002 139
16	I - 12p - 123	1	Auslösrohr " A " cable release socket " A " an Stelle von I - 12 - 123.1 inst. of I - 12 - 123.1
26	IJRX5p - 72a	1	Auslösrohr " B " cable release socket " B " an Stelle von IJRX5q - 72a inst. of IJRX5q - 72a
43	I - 10p2 - 134	1	Einstellbogen scale band an Stelle von I - 10 - 134 inst. of I - 10 - 134
44	I - 10p - U 80	1	Antriebring drive ring an Stelle von I - 10 - U 80 inst. of I - 10 - U 80
46	IJRX5p - 61	5	Sektor shutter blade an Stelle von IJRX5 - 61 inst. of IJRX5 - 61
48	I - 10p2 - 10	1	Irisdeckscheibe diaphragm covering disc an Stelle von I - 10 - 10 inst. of I - 10 - 10
50	I - 10p - U 8	1	Irisscheibe diaphragm disc an Stelle von I - 10 - U 8 inst. of I - 10 - U 8
50a	7 002 953	1	Fixierschraube locating screw
57	I - 10p - U 2	1	Boden ohne Bild wird nicht abgegeben an Stelle von I - 10 - U2 bottom without illustration cannot be supplied inst. of I - 10 - U2
58	I - 10p2 - 7	1	Iriszeigerring diaphragm pointer ring an Stelle von I - 10 - 7 inst. of I - 10 - 7
59	IJRX5p - 164	1	Anschraubring flange
			Die übrigen Teile nach Grundmodell I - 10 The remaining parts as per basic model I - 10

GAUTHIER

INSTRUCTIONS FOR REPAIR SHOPS

PHOTOGRAPHIC SHUTTERS

Service Instructions for PRONTOR Shutters
Models PRONTOR-PRESS I-12p and I-12p1

1. General Introductory Remarks

The purpose of these service instructions is to assist repairmen in handling repairs rapidly, efficiently, reliably and without any appreciable difficulties. The instructions start with a description of the operation of the shutter and it is advisable to read this paragraph carefully, for the knowledge of the functions of the individual components is the basis for understanding the co-ordinated operation of all components in the PRONTOR-PRESS shutter.

Notes

a) The PRONTOR-PRESS shutter can only be dismantled after it has previously been removed from the camera.

b) The numbers used in the text are the line item numbers in the spare parts list.

c) A reference to right or left in the service instructions refers to the position shown in the illustrations in the spare parts list.

All parts shown in the spare parts list are shown in the position as assembled in the shutter, so that in case of doubt they can be used as reference.

a) Tools for the Repair

Apart from the front plate wrench MV 100 and the lever bending tool A2 there are no other special tools required for dismantling and repairing a shutter.

In selecting the screwdrivers it is important, however, to select the right size for the various screws. Wherever screwdrivers of improper size are used, chances are that the slots in the screws will be damaged.

b) Lubricants

The manufacturer lubricates the shutter by means of special pastes at all positions requiring lubrication and this lubrication can be regarded as life-time lubrication. In doing repair work lubrication is only necessary where parts have been washed or been replaced by new ones.

From the attached lubrication diagram it can be seen at what points the shutter components have to be lubricated and what lubricant is to be used.

Note

In lubricating the shutter, lubricants other than those indicated in the lubrication diagram must not be used. Oil or grease must not be used in the shutter. The repairman must see that there will be no accummulation of lubricants on edges, in openings and holes. If necessary the excessive lubricant must be wiped off.

c) Spare Parts

If in repairing a shutter it is necessary to replace parts, only

factory-made spare parts

should be used. These parts can be ordered by using the attached spare parts list as reference. In this respect it is necessary to indicate the exact designation and the part number given in the spare parts list, for this is the only way to insure that the correct replacement parts will be supplied.

2. Mode of Operation

By actuating the tripping lever 21 (or the cable release) the PRONTOR-PRESS single-action shutter is cocked and tripped. When the cocking lever is actuated, the cocking latch 102

- pivotally riveted to the tripping lever 21, strikes the stop lug of the drive lever 31 and displaces the latter radially toward the rim of the shutter. An integral raised lug of the drive lever 31 strikes a star-shaped locking lever 108 riveted to the shutter blade ring 41, which locks the drive ring 40, and displaces this ring toward the rim of the shutter. At the same time the brake latch 104 pivotally riveted to the driving lever 31, slides along the abutment of the brake lever 36 toward the nozzle. Just before the end of the cocking travel the driving latch 104 riveted to the driving lever, engages the ring lever; and the cocking latch 102 displaces the lever 27, preventing the tripping of the shutter, toward the rim of the shutter, then the driving lever 31 becomes disengaged and the shutter completes its cycle.

  The shutter cycle involves the following operations:

  During the return travel of the drive lever 31 the driving latch 103 displaces the ring lever 24 and the drive ring 40 connected to it, the shutter blades 43 open and depending upon the previously set shutter speed, the cycle is delayed by the action of the slow speed assembly 8 and of the brake lever 36 (see speed setting system).

  The brake lever 36 returning to its original position while the shutter completes its cycle, disengages the braking latch 104, while simultaneously the ring lever 24 driven by the driving latch 103, returns the driving ring 40 to its starting position - the shutter blades close and the star-shaped locking lever 108 engages the drive ring lug and thus prevents bouncing of the shutter blades 43.

  When the tripping lever 21 becomes disengaged, the ring lever 24 becomes again engaged by the tripping prevention lever 27.

b) Time Exposures "B" or "T"

When set for instantaneous speedsthe locking lever 11 and the B lever 10 resting against the locking lever are displaced toward the rim of the shutter by the integral control slot of the setting ring 3 to such an extent that the driving lever 31 slips past.

Setting "B"

When the setting ring 2 is rotated to the position "B", the locking lever becomes disengaged to such an extent that the B lever 10 rests only against the raised lug of the tripping lever 21.

When the shutter completes its cycle, the B lever 10 travels in the direction of the nozzle, so that the drive lever 31 is stopped in operation and kept in position when the shutter blades are completely opened. During the return travel the raised lug of the tripping lever 21 is displaced toward the rim of the shutter and the driving lever 31 becomes disengaged permitting the shutter to complete its cycle and the shutter blades to close.

Setting "T"

When the shutter is set for "T" the locking lever 11 is completely disengaged from the setting ring and rests against the driving lever 31. Similar to setting "B", when the shutter completes its cycle, the B lever 10 stops the driving lever 31 when the shutter blades are open, while the locking lever 11, still resting against the raised lug of the tripping lever 21,has not returned to its original position.

Permitting the tripping lever 21 to return to its original position entails the following operations:

The locking lever 11 and the B lever 10 are simultaneously moved by the raised lug of the tripping lever 21. While the locking lever, which is a little shorter than the B lever 10, moves right in front of the abutment of the driving lever 31, the B lever is displaced toward the rim of the shutter, so that the driving lever 31 rests only against the locking lever 11.

The tripping lever 21 is caught by the integral locking abutment of the locking lever 11, so that the cycle of the shutter is interrupted and the shutter blades stay open. A repeated actuation of the tripping lever 21 in the cocking direction causes the locking lever 11 to be likewise displaced toward the rim of the shutter, the driving lever 31 becomes disengaged, the shutter completes its cycle and the shutter blades 43 close.

3. Dismantling and Re-assembling the Shutter

a) Dismantling the Shutter

After removing the four bottom screws 49, the bottom 50 together with the diaphragm system can be lifted off (for details please see diaphragm system - sheet 11).

The shutter blades 43 can be lifted off immediately. The star-shaped locking lever 106 has to be seized by use of a pair of pincers and moved a little bit toward the rim of the shutter thus making the shutter blade ring 41 accessible and it can then be lifted off. The drive ring 40 must first be lifted slightly at the slow speed assembly 8 and then pulled out from underneath the ring lever 24.

The removal of the other parts is relatively easy and only in such cases where it is deemed necessary are details given in the descriptions of the individual systems.

Note

Should it be necessary to remove the front plate 2, the setting ring 3, or the detent notch spring 4, the front plate ring 1 must first be removed by means of the front plate ring wrench MV 100.

b) Re-assembling the Shutter

In general, attention must be given that in re-assembling the shutter no levers will be bent and no springs stretched, as otherwise there will be no assurance of a proper shutter function.

Further details will be given in the descriptions of the individual systems.

4. Cocking and Tripping System

The mode of operation of the cocking and tripping system has already been described in section 2. The following paragraph contains instructions on how to replace parts, on the assembly and on the correction of defects.

a) Replacing Tripping Lever and Driving Latch

The B and locking lever spring 20 is unhooked from the B lever by use of a pair of pincers. Similarly the driving spring is unhooked from the driving lever 31. Then after loosening the locking lever screw 9, the locking lever 11 and the B lever 10 and after removing the driving lever screw 29, the driving lever 31 is removed from the shutter. When removing the bearing bridge screw 17, the driving latch spring 22 must be held in position by use of a pair of pincers to avoid flipping off of the spring. After removing the bearing bridge 18, the tripping lever 21 and the driving latch 102 become accessible and can be removed from the shutter after the tripping spring has previously been unhooked.

b) In assembling the shutter the repairman must first see to it that the cable release socket pin 15 is in the cable release socket 14. Then the tripping lever 21 together with the hooked-up tripping spring 21a is fitted into the shutter. The spacing bushing 19 and then the bearing bridge 18 are placed in position and screwed on by means of the bearing bridge screw 16.

The cocking latch spring 22 has to be placed over the spacing bushing 19 and to be held by use of a pair of pincers in such a manner that both arms of the spring are held in position. Slide the spacing bushing 19 and the driving latch spring 22 under the bearing bridge 18 and fit in and tighten the bearing bridge screw 17. The long arm of the spring must be placed against the rivet underneath the driving latch spring 102. To fit in the driving lever 31, the ring lever 24 and the tripping prevention lever 27 have to be turned toward the right (clockwise) and placed against the wall of the housing.

Tighten the B and locking levers 10 and 11. Remove the B and locking lever spring 20 from the bearing bridge, place one spring arm into the hole drilled for the spring in the locking lever 11, push it back onto the bearing rivet and place the other spring arm against the lug of the B lever 10.

Note

During the initial period of the manufacture the shutters were only fitted with the driving latch spring 22 (part no. IJRX5-93). When the driving latch spring 22 was modified and fitted into the shutter by means of a spacing bushing 19, the shutter was also fitted with the tripping spring 21a. The cycle of operations of the shutters that are only fitted with the driving latch spring 22, is the same as previously described in section b and only the assembly is slightly different.

INSTRUCTIONS FOR REPAIR SHOPS

Defect	Cause of the Defect	Correction
1. Shutter does not cock.	1. Driving latch spring 22 does not rest against the spring rivet.	1. Seize the cocking latch spring 22 and place it against the spring rivet of the driving latch 102.
1b Shutter does not cock.	1b Tripping prevention lever 27 does not rest against the ring lever 24, so that the cocking latch 102 is blocked.	1b Rotate the tripping prevention lever 27 clockwise to such an extent that during the return travel it is stopped by the ring lever 24.
2. Tripping lever 21 does not or only very reluctantly return to its starting position.	2. Tripping lever spring 21a is not hooked up or may be stretched.	2. Hook up or replace tripping lever spring 21a.
3. Shutter cocks but does not trip.	3a Driving latch spring is not placed in position.	3a Insert the driving latch spring 28 into the drilled hole of the driving latch and place the other spring arm against the rivet for the driving spring 32.
	3b The ring lever 24 is not in the recessed portion of the drive ring 40.	3b Properly fit in the drive ring 40 (see shutter blade system).

Defect	Cause of the Defect	Correction
4. When set for slower instantaneous speeds the shutter completes its cycle, i. e. although the shutter has been set for a speed of 1 sec. the shutter blades close immediately.	4. The driving spring 32 is not properly hooked up.	4. Hook up the driving spring 32.

5. Slow Speed Assembly and Speed Setting System

By rotating the setting ring 3 both the engagement of the brake lever 36 and the engagement and disengagement of the escapement are controlled. Whereas the shutter speeds from 1/60 to 1/15 sec. are attained exclusively by action of the gear train, for the speeds from 1/8 to 1 full second the escapement is brought into engagement.

The top speed of 1/125 sec. is attained without engagement of either the escapement or the gear train.

The integral speed control cam of the speed setting ring 3 governs the starting position of the brake lever 36 controlling the exposure time. Before the slow speed assembly 8 can be removed from the shutter, the brake lever 36 must be removed from the shutter, so that after the two fixing screws of the slow speed assembly 6 and 7 have been unscrewed, the slow speed assembly can be lifted off.

For fitting the slow speed assembly 8 into the shutter, the setting ring has to be rotated to the 1 sec. position. Then the slow speed assembly 8 can be fitted and screwed on.

The brake lever 36 must be placed on the bearing pin of the gear segment. The washer must be placed on the threaded hole and the brake lever 36 goes on top of it and is screwed into position. Place the brake lever spring 101 into the groove of the brake lever screw 35 and against the rivet of the gear segment.

Defect	Cause of the Defect	Correction
1. When set for slower instantaneous speeds the shutter completes its cycle instantly. Please also see defect 4 in the cocking and tripping system.	1. Brake lever spring 101 does not rest in position, so that the brake lever 36 cannot stop the braking latch 104.	1. Place brake lever spring 101 against the gear segment and against the brake lever screw as described in paragraph 5.
2. Shutter speeds are slower than provided for by the program.	2. Brake lever 36 does not move easily; washer 37 has been omitted.	2. Remove the brake lever 36 and reinstall it together with washer 37.

Hint for Making Adjustments

The shutter speeds can be adjusted by filing or swaging the integral speed control cam of the setting ring. The shutter speeds can only be accurately tested by use of a shutter speed tester.

6. Shutter Blade System

Assembly

Place the driving ring 40 with the recessed portion under the ring lever 24 in such a manner that the rivet will fit into the recess. It must be noted that the contact lug 107 is located before the contact spring 100 and that the pin of the escapement lever comes to rest against the abutment 106. Seize the star-shaped locking lever 106 by use of a pair of pincers as described in section 3a, move it toward the rim of the shutter and fit in the shutter blade ring 41 in such a manner that the locking lever screw 9 will be accepted by the small rectangular hole.

For assembling the shutter blades 43, rotate the setting ring to "T" and trip the shutter once. Starting from the cable release socket 14, the shutter blades must be assembled clockwise, with the last shutter blade coming to rest on top of the first one. Then the bottom with the diaphragm system must be placed on and screwed in position.

Note

Shutter blades and diaphragm blades must be handled with particular care and protected against fingerprints. As a rule diaphragm blades and shutter blades that are not in perfect condition should be replaced. Diaphragm blades and shutter blades should never be oiled or greased.

7. Diaphragm System

After removing the diaphragm covering disc 45 mounted to the bottom 40 of the shutter by means of three screws, the diaphragm blades become accessible.

Assembly

Place the diaphragm covering disc 45 in front of you as illustrated in the apare parts list and assemble the diaphragm blades clockwise so that the rivets project into the drilled holes. Open or close the diaphragm blades in such a manner that they form a circle of the same diameter as the opening. Fit the diaphragm pointer disc 48 into the bottom 50 of the shutter and rotate it so that the pointer as seen from the nozzle will come to a stop in a clockwise direction. Adjust the diaphragm covering disc 47 and the bottom 50 according to the threaded holes and place the bottom together with the diaphragm pointer disc on top of the diaphragm covering disc with the diaphragm blades.

A slight rotation of the diaphragm covering disc 48 causes the rivets to project into the slots of the diaphragm pointer disc and that the diaphragm covering disc can be screwed to the bottom.

Defect	Cause of the Defect	Correction
1. Diaphragm pointer disc 48 does not move easily.	1a. The diaphragm pointer disc or the diaphragm covering disc is bent out of position.	1a. Fit in new discs.
	1b. Diaphragm blades are damaged.	1b. Replace diaphragm blades.

8. Flash Contact System

When the shutter completes its cycle, the contact 107 of the drive ring 40 presses the flash contact spring 100 against the strobe connector riveted into the wall of the shutter housing and thus forms a live connection.

INSTRUCTIONS FOR REPAIR SHOPS

Defect	Cause of the Defect	Correction
1. With the flash equipment in proper working condition, it does not fire.	1a. The contact is not closed, because the contact lug 102 of the driving ring is bent out of position.	1a. Adjust the contact lug 107 or replace the drive ring 40.
	1b. Drive ring 40 is not properly installed; contact lug 107 is located between flash contact spring 100 and contact pin.	1b. Fit in the driving ring 40 in such a manner that when the driving ring is rotated the contact lug 107 presses the flash contact spring 100 against the strobe connector.
	1c. Flash contact spring 100 is bent out of position.	1c. Adjust the flash contact spring 100.
2. Contact does take place at the moment when the shutter blades reach the proper position.	2. Contact lug 107 is bent out of position.	2. see 1a.

PRONTOR-PRESS I-12
LUBRICATION DIAGRAM

Item No.	Designation	Lubricant	Lubrication Aids	Remarks - Lubrication Points
3	Setting ring	Losoid 70		Inside diameter, control slots and bearing surfaces on both sides
5	Housing	BR 2	MV 160/2	Tripping lever 21, bearing bushing
		Molykote paste G rapid		Drive ring seat
10	B lever	BR 2	Brush	Bearing hole, supporting surface and stop abutment for the drive lever 31
11	Locking lever	BR 2	Brush	
14	Cable release socket	Losoid 70	MV 161/3	Drilled hole
15	Cable release socket pin	G rapid		Drive surface
24	Ring lever	G rapid		Bearing hole
26	Spring of the tripping prevention lever	Losoid 70	Grease pad	
28	Driving latch spring	Losoid 70	Grease pad	
31	Driving lever	BR 2	Brush	Bearing hole and driving edge
36	Brake lever	BR 2	MV 161/4	Drilled hole
			Brush	Stopping abutment
40	Drive ring	G rapid		Recess for ring lever rivet
		BR 2	Brush	Disconnecting lug 106
102	Cocking latch	Alpha		Point of impact of the tripping pin
		BR 2	Brush	Driving edge
103	Driving latch	G rapid	Brush	Recess accepting the rivet of the ring lever

BR 2 and G rapid are Molykote pastes.

Grease pad - a piece of felt impregnated with a lubricant.

To introduce the lubricants into the drilled holes please use either the lubricating awls (MV 161/...) referred to or metal sticks of the respective diameter.

Please note the instructions under 1b.

Ersatzteilliste

PRONTOR - PRESS I - 12

Kamera :

Optik / Lens :

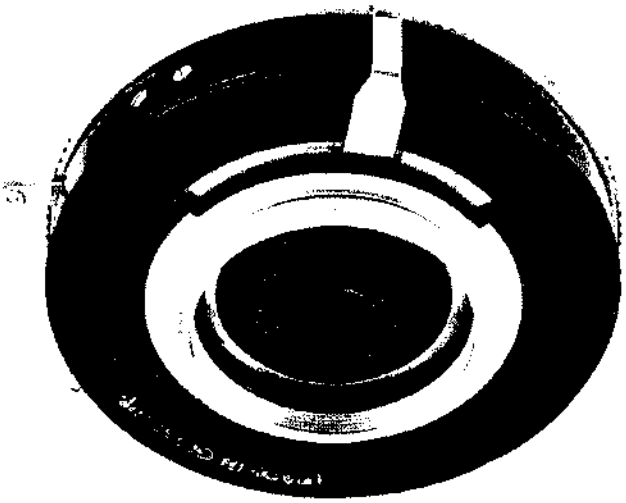
Liste best. aus Blatt 1 - 7

Anz. der Änd. Bl. 8 –

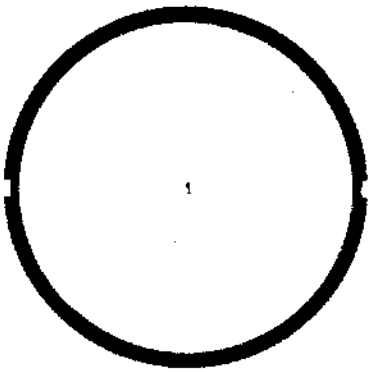
Gefertigt 26. 2. 65 fe

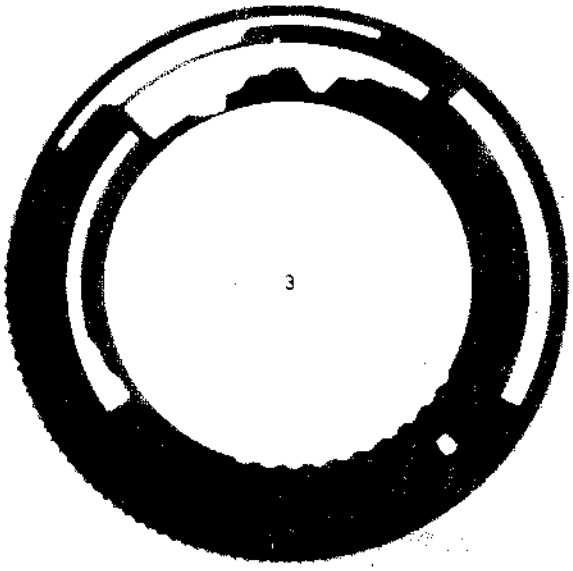
Geprüft

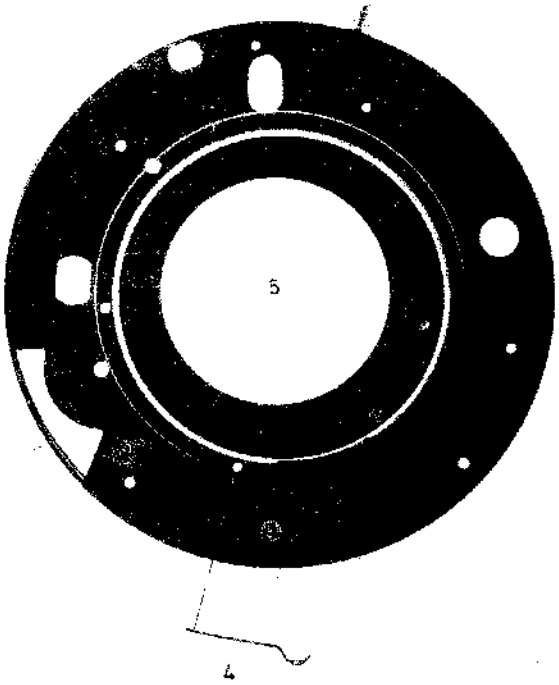
Blatt Nr. 1



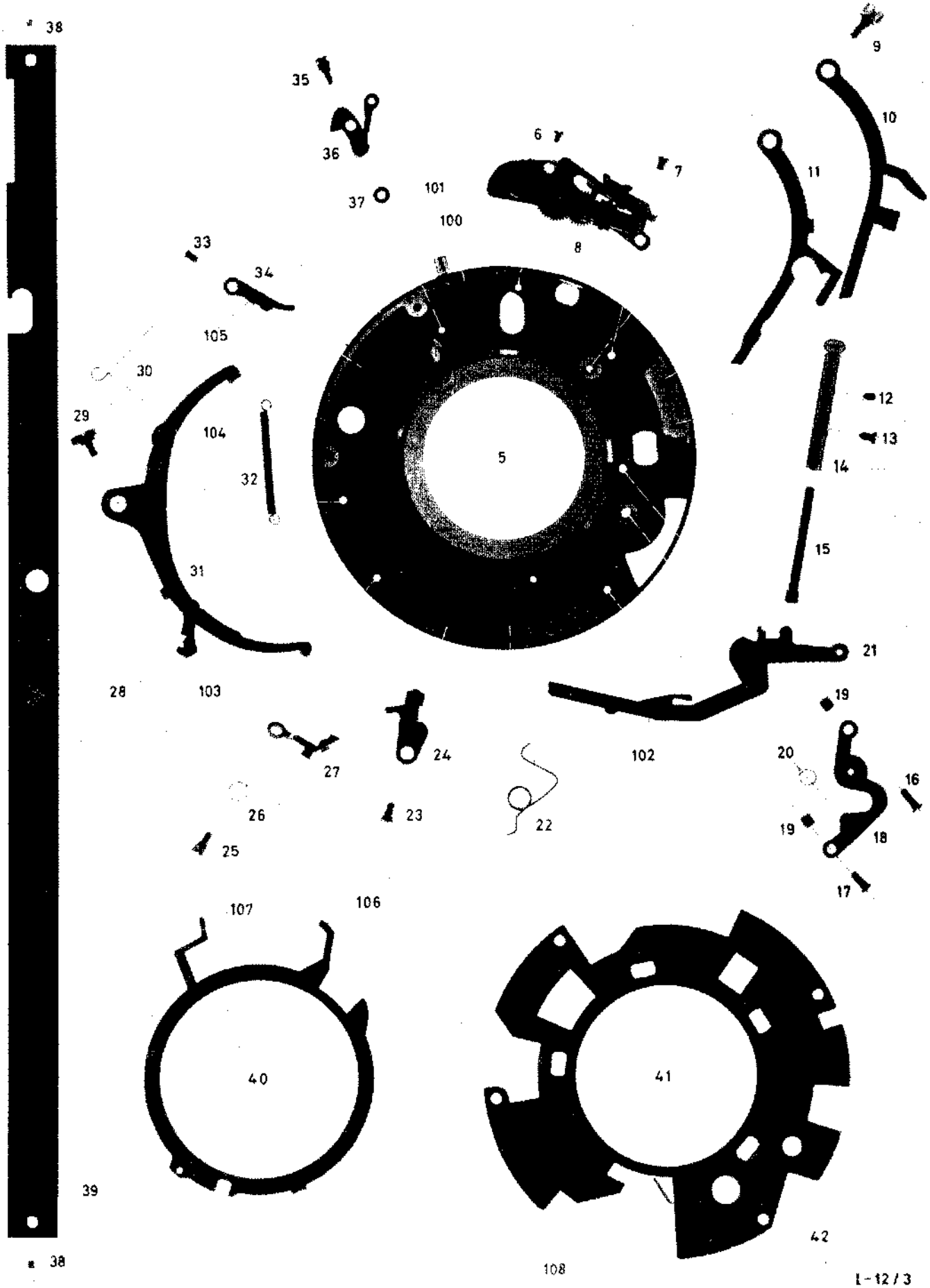
Ersatzteilliste	Gefertigt 26. 2. 65 fe	
PRONTOR - PRESS I - 12	Geprüft	Blatt Nr. 2







Ersatzteilliste	Gefertigt 26. 2.65 fe	
PRONTOR - PRESS I - 12	Geprüft	Blatt Nr. 3



I - 12 / 3

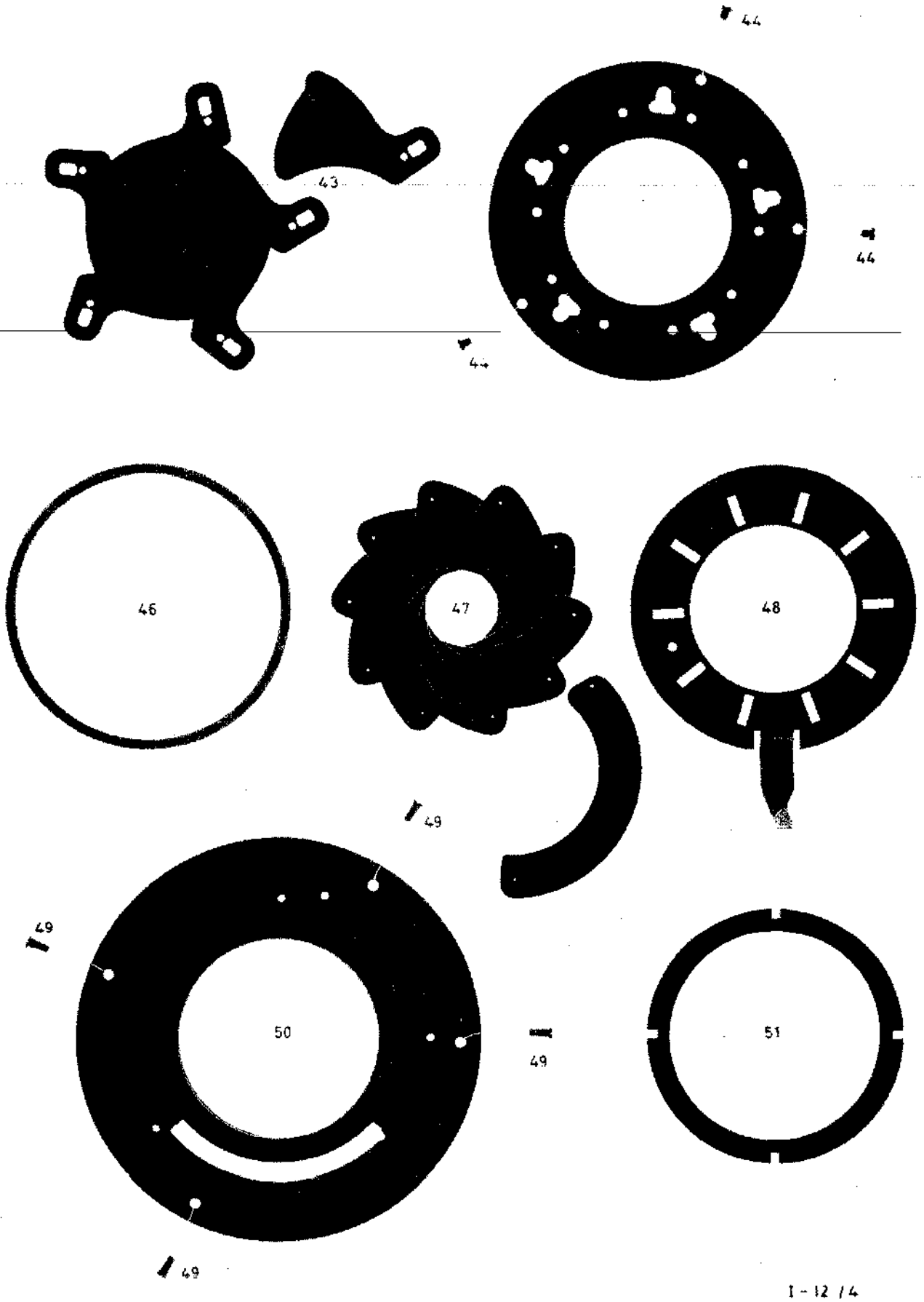
Ersatzteilliste

PRONTOR - PRESS I - 12

Gefertigt 26. 2. 65 fe

Geprüft

Blatt Nr. 4



I - 12 / 4

Ersatzteilliste

PRONTOR - PRESS I - 12

Gefertigt 26. 2. 65 fe.

Geprüft

Blatt Nr. 5

Pos.	Teil – Nr.	Stück	Benennung
1	IJRX5p - 239.1	1	Frontplattenring front plate ring
2	I - 12 - 143	1	Frontplatte front plate
3	I - 12 - 137	1	Einstellring speed setting ring
4	0376y - 362	1	Rastenfeder notch spring
5	I - 12 - U 1	1	Kapsel housing wird nicht abgegeben cannot be supplied
6	7 000 684	1	Hemmwerkschraube screw for slow speed assembly
7	7 002 002	1	Hemmwerkschraube screw for slow speed assembly
8	I - 12 - G 20	1	Hemmwerk slow speed assembly wird nur als Ganzes abgegeben only complete unit can be supplied
9	7 000 616	1	Sperrhebelschraube locking lever screw
10	I - 12 - 119	1	Zeithebel B - lever
11	I - 12 - U122	1	Sperrhebel locking lever
12	IJRX5p - 73	1	Gewindestift threaded pin
13	7 002 026	1	Auslösrohrschraube cable release socket screw
14	I - 12 - 123.1	1	Auslösrohr cable release socket
15	I - 12 - U124	1	Auslösstift cable release socket pin
16	7 002 992	1	Lagerbrückenschraube bearing bridge screw
17	7 001 445	1	Lagerbrückenschraube bearing bridge screw
18	I - 12 - U361	1	Lagerbrücke bearing bridge
19	I - 13 - 464	2	Distanzbüchse distance bushing

Ersatzteilliste

PRONTOR - PRESS I - 12

Gefertigt 26. 2. 65 fe.

Geprüft

Blatt Nr. 6

Pos.	Teil – Nr.	Stück	Benennung
20	I - 12 - 121,1	1	Zeit und Sperrhebelfeder B and locking lever spring
21	I - 12 - U 85	1	Auslöser release
22	I - 12 - 682	1	Spannklinkenfeder cocking latch spring
23	7 002 294	1	Ringhebelschraube ring lever screw
24	I - 12 - U 67	1	Ringhebel ring lever
25	7 000 604	1	Auslösesperrhebelschraube release stop lever screw
26	I - 12 - 159	1	Auslösesperrhebelfeder release stop lever screw
27	I - 12 - 156	1	Auslösesperrhebel release stop lever
28	IJRX5 - 70	1	Treibklinkenfeder driving latch spring
29	OJR10 - 102,1	1	Treibhebelschraube drive lever screw
30	JRI - 64	1	Bremsklinkenfeder brake latch spring
31	I - 12 - U 96	1	Treibhebel drive lever
32	I - 12 - 132	1	Treibfeder drive spring
33	7 001 416	1	Reguliorhebelschraube adjusting lever spring
34	IJRX5 - U 45	1	Regulierhebel adjusting lever
35	3114 - 25 - 3220	1	Bremshebelschraube brake lever screw
36	IJRX5 - U 34,1	1	Bremshebel brake lever
37	OJRX5 - 78	1	Unterlegscheibe für Bremshebel washer for brake lever
38	7 000 073	2	Einstellbogenschraube scale band screw

Ersatzteilliste

PRONTOR - PRESS I - 12

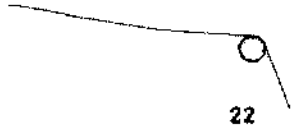
Gefertigt 26. 2. 65 fe

Geprüft

Blatt Nr. 7

Pos.	Teil – Nr.	Stück	Benennung
39	I - 12 - 134	1	Einstellbogen scale band
40	I - 12 - U 80	1	Antriebring drive ring
41	I - 12 - U685.1	1	Sektorenring shutter blade ring
42	I - 12 - 971	1	Sternsperrhebelfeder drive ring lock spring
43	IJRX5 - 61	6	Sektor shutter blade
44	7 002 002	3	Irisdeckscheibenschraube diaphragm covering disc screw
45	IJRX5 - 8.2	1	Irisdeckscheibe diaphragm covering disc
46	IJRX5p - 591	1	Federring spring ring
47	I - 12 - U 5	10	Irislamelle diaphragm blade
48	I - 12 - 7	1	Iriszeigerscheibe diaphragm pointerdisc
49	7 001 443	4	Bodenschraube bottom screw
50	I - 12 - 2	1	Boden bottom wird nicht abgegeben cannot be supplied
51	JRI - 71	1	Anschraubring flange
			Die Positionszahlen über 100 beziehen sich auf den Text der Reparatur - Hinweise The index numbers above 100 refer to the text of the " Instructions for Repair Shops"

21a



22

Ersatzteilliste Geänderte Teile / Changed parts

PRONTOR - PRESS I - 12

Gefertigt 26. 2. 65 fe.

Geprüft

Blatt Nr. 9

Pos.	Teil - Nr.	Stück	Benennung	Änd. Nr.
21a	IJRX5 - 52	1	Auslöserfeder release spring an Stelle von I-12 - 682 inst. of I-12 - 682	5304
22	IJRX5 - 93	1	Spannklinkenfeder cocking latch spring an Stelle von I-12 - 682 inst. of I-12 - 682	"

Ersatzteilliste

PRONTOR-PRESS I-12p

Fa. Polaroid, USA

Kamera :

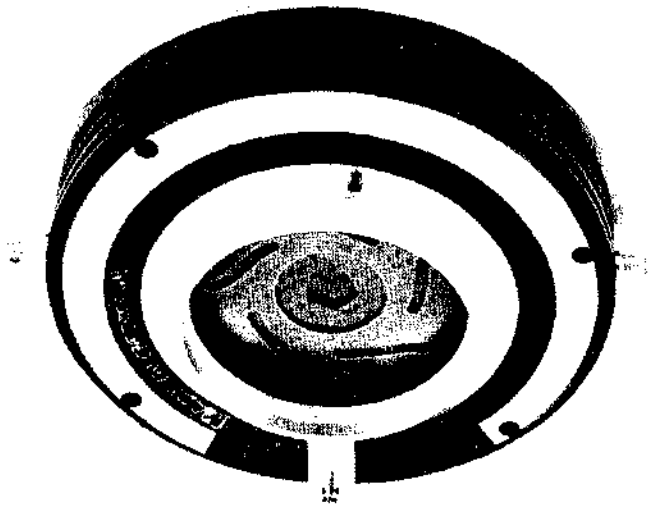
Optik/Lens: Ysaron 1:4.5/75

Liste best. aus Blatt 1-4
Anz. der Änd. Bl.

Gefertigt 26.2.65

Geprüft

Blatt Nr. 1



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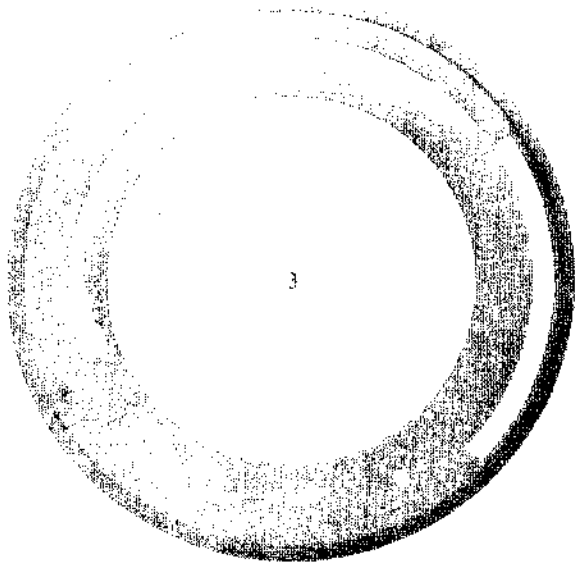
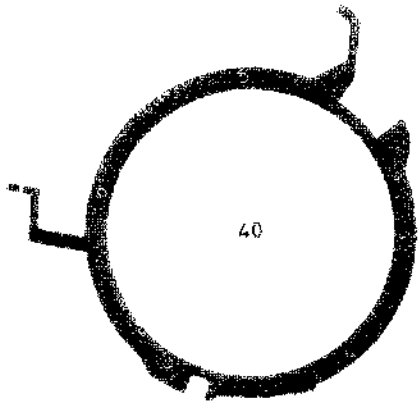


3

14



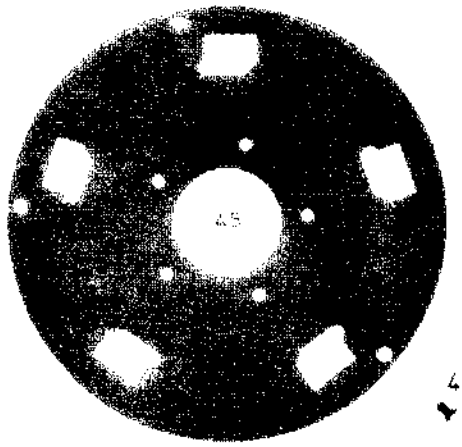
40

39

44a

43

44



45

44

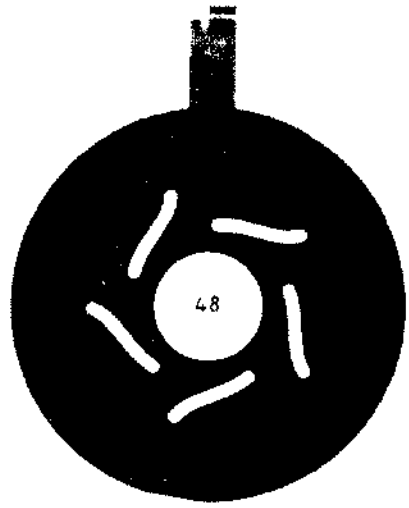
Ersatzteilliste

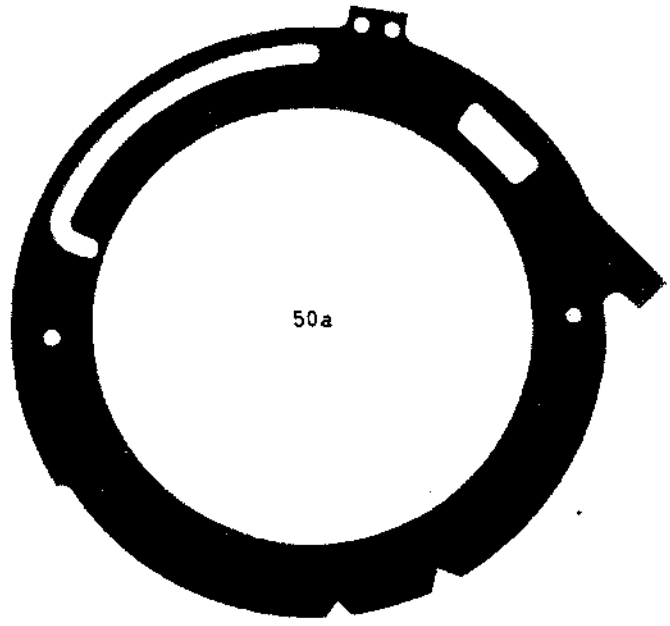
PRONTOR-PRESS I-12p

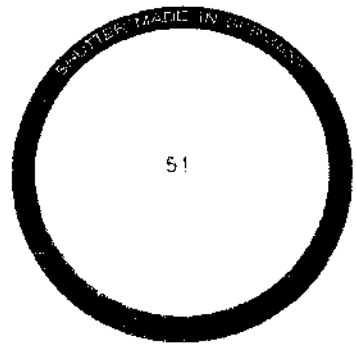
Gefertigt 26.2.65 fe

Geprüft

Blatt Nr. 3







Ersatzteilliste

PRONTOR - PRESS I - 12 p

Gefertigt 26. 2. 65 fe

Geprüft

Blatt Nr. 4

Pos.	Teil – Nr.	Stück	Benennung
2	I - 12p - 143	1	Frontplatte front plate an Stelle von I - 12 - 143 inst. of I - 12 - 143
3	I - 12p - 137	1	Einstellring speed setting ring an Stelle von I - 12 - 137 inst. of I - 12 - 137
5	I - 12p - U 1	1	Kapsel ohne Bild wird nicht abgegeben an Stelle von I - 12 - U1 housing without illustration cannot be supplied inst. of I - 12 - U1
14	I - 12p - 123	1	Auslösrohr cable release socket an Stelle von I - 12- 123.1 inst. of I - 12 - 123.1
39	I - 12p - 134	1	Einstellbogen scale band an Stelle von I - 12 - 134 inst. of I - 12 - 134
40	I - 12p - U 80	1	Antriebring drive ring an Stelle von I - 12 - U 80 inst. of I - 12 - U 80
43	IJRX5p - 61	6	Sektor shutter blade an Stelle von IJRX5 - 61 inst. of IJRX5 - 61
44	7 002 002	2	Irisdeckscheibenschraube diaphragm covering disc screw an Stelle von 7 002 002 3 Stück inst. of 7 002 002 3 pcs.
44a	7 002 561	1	Irisdeckscheibenschraube diaphragm covering disc screw
45	I - 12p - 10	1	Irisdeckscheibe diaphragm covering disc an Stelle von IJRX5 - 8.2 inst. of IJRX5 - 8.2
47	476 - U 5	5	Irislamelle diaphragm blade an Stelle von I - 12 - U 5 10 Stück inst. of I - 12 - U 5 10 pcs.
48	I - 12p - U 7	1	Iriszeigerscheibe diaphragm pointer disc an Stelle von I - 12 - 7 inst. of I - 12 - 7
49a	7 002 953	1	Fixierschraube locating screw
50	I - 12p - 2	1	Boden ohne Bild wird nicht abgegeben an Stelle von I - 12 - 2 bottom without illustration cannot be supplied inst. of I - 12 - 2
50a	I - 12p - 7a	1	Blendenring diaphragm ring
51	I - 12p - 141	1	Anschraubring flange an Stelle von JRI - 71 inst. of JRI - 71
			Die übrigen Teile nach Grundmodell I - 12 The remaining parts as per basic model I - 12

Ersatzteilliste

PRONTOR-PRESS I-12 p1

Fa. Polaroid, USA

Kamera :

Optik/Lens: Ysarex 1:4,7 /127

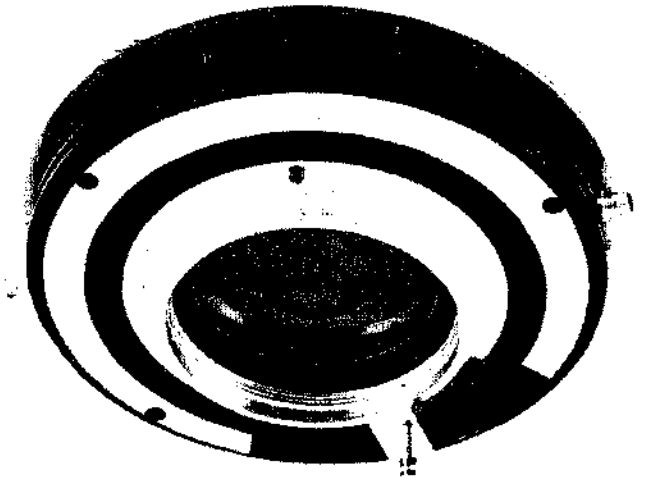
Liste best. aus Blatt 1 - 4

Anz. der Änd. Bl.

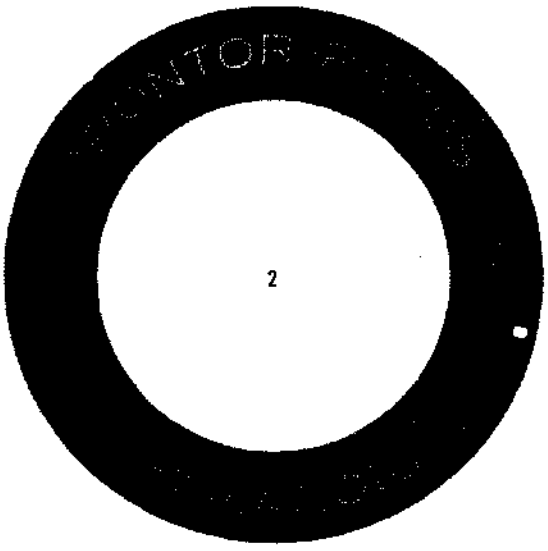
Gefertigt 26. 2. 65 fe.

Geprüft

Blatt Nr. 1



Ersatzteilliste	Gefertigt 26.2.65 fe.	
PRONTOR - PRESS I - 12 p1	Geprüft	Blatt Nr. 2



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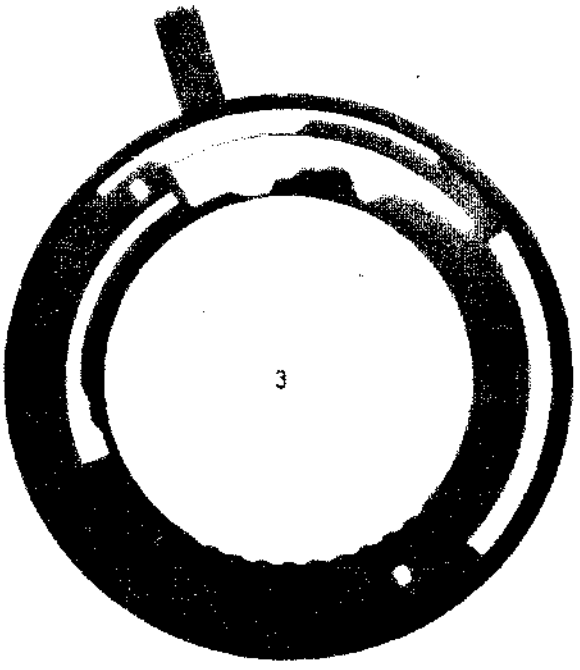
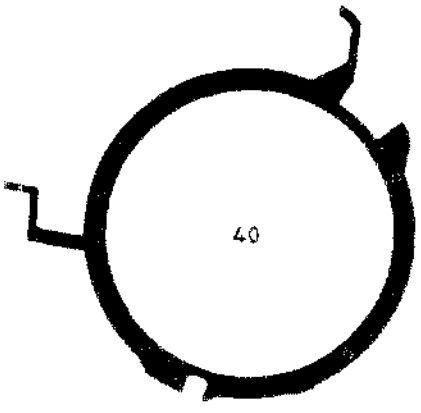


3

14

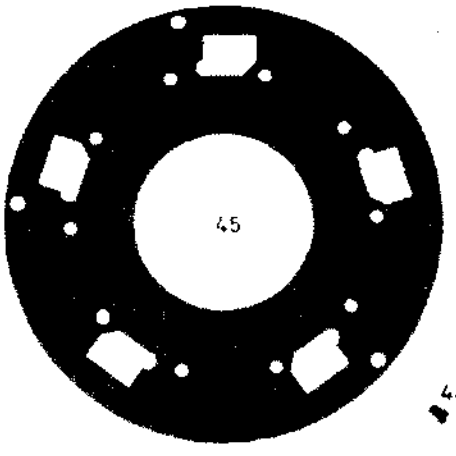


40

39

44a

43



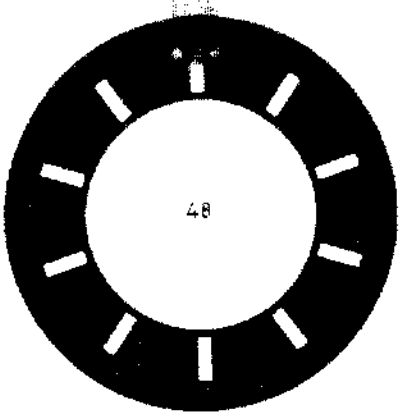
44

45

44

I - 12p1 / 2

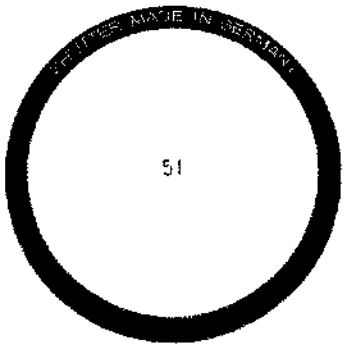
Ersatzteilliste	Gefertigt 26. 2.65 fe	
PRONTOR - PRESS I - 12 p1	Geprüft	Blatt Nr. 3



48

49a

50a



51

Ersatzteilliste

PRONTOR - PRESS I - 12 p1

Gefertigt 26. 2. 65 fe.

Geprüft

Blatt Nr. 4

Pos.	Teil – Nr.	Stück	Benennung
2	I - 12p - 143	1	Frontplatte front plate an Stelle von I - 12 - 143 inst. of I - 12 - 143
3	I - 12p - 137	1	Einstellring speed setting ring an Stelle von I - 12 - 137 inst. of I - 12 - 137
5	I - 12p - U 1	1	Kapsel ohne Bild wird nicht abgegeben an Stelle von I - 12 - U1 housing without illustration cannot be supplied inst. of I - 12 - U1
14	I - 12p - 123	1	Auslösrohr cable release socket an Stelle von I - 12 - 123.1 inst. of I - 12 - 123.1
39	I - 12p1 - 134	1	Einstellbogen scale band an Stelle von I - 12 - 134 inst. of I - 12 - 134
40	I - 12p - U 80	1	Antriebring drive ring an Stelle von I - 12 - U 80 inst. of I - 12 - U 80
43	I - 12p - 116	6	Sektor shutter blade an Stelle von IJRX5 - 61 inst. of IJRX5 - 61
44	7 002 002	2	Irisdeckscheibenschraube diaphragm covering disc screw an Stelle von 7 002 002 3 Stück inst. of 7 002 002 3 pcs.
44a	7 002 561	1	Irisdeckscheibenschraube diaphragm covering disc screw
45	IJRX5p2 - 8	1	Irisdeckscheibe diaphragm covering disc an Stelle von IJRX5 - 8.2 inst. of IJRX5 - 8.2
48	I - 12p1 - U 7	1	Iriszeigerscheibe diaphragm pointer disc an Stelle von I - 12 - 7 inst. of I - 12 - 7
49a	7 002 953	1	Fixierschraube locating screw
50	I - 12p1 - 2	1	Boden ohne Bild wird nicht abgegeben an Stelle von I - 12 - 2 bottom without illustration cannot be supplied inst. of I - 12 - 2
50a	I - 12p1 - 7a	1	Blendenring diaphragm ring
51	I - 12p - 141	1	Anschraubring flange an Stelle von JRI - 71 inst. of JRI - 71
			Die übrigen Teile nach Grundmodell I - 12 The remaining parts as per basic model I - 12

Instructions for the Repair of the PRONTOR I/RX5p Shutter

- - - - - - - - - - - - - - - - - -

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b) when set for "B" (time exposures)	
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Appendix:

Spare Parts List

Repair Instructions for GAUTHIER Shutters
Model PRONTOR IJRX5p

- -

1. General Introductory Remarks

These repair instructions have been written in order to enable repairmen to furnish a quick, efficient and reliable repair service without any major difficulties.

They start with a description of the mode of operation of the shutter, and it is recommended to read this paragraph very carefully, for the knowledge of the functions of the individual components is the basis for understanding the concerted operation of all components in the Gauthier P R O N T O R precision shutter.

a) Tools for Repair Work

Apart from the front plate wrench MV 100, and the lever bending tool A2 there are no other special tools required for dismantling and repairing the shutter.

However, in selecting the screwdrivers it is very important to use a screwdriver of the proper size for the various screws. If screwdrivers of a non-fitting size are used, the repairman will run the risk of damaging the screw slots. As a result it will be impossible to loosen the screws.

b) Lubricants

The manufacturer lubricates the shutter at all points requiring lubrication by means of lubricating pastes

that can be regarded as life-time lubricants. In repair work additional lubrication is required only in such cases where parts are washed or replaced by new ones. The attached lubricating diagram indicates the points of the shutter parts that require lubrication, and the type of lubricant to be used.

Note

Only those lubricants indicated in the lubricating diagram should be used for lubricating the shutter. By using a different type of lubricant the repairman will run the risk that the viscosity will not meet the specific requirements, which means that the shutter blades might be glued together by the lubricant, or the gears may become gluey resulting in each case in incorrect shutter speeds. Attention must also be given that there will not be an excessive amount of lubricant at the edges, recesses and drilled holes. If necessary the lubricant must be wiped off carefully.

c) Spare Parts

If in repairing a shutter it is necessary to replace individual components, only

FACTORY-MADE SPARE PARTS

should be used. The parts can be ordered by use of the attached spare parts list. However, it is necessary to state the exact designation and the part number shown in the list. This is the only possible way for us to supply the correct spare parts.

2. Mode of Operation

a) Instantaneous Speeds

Shutter speed and aperture are set to the desired values. A pressure on the cable release plunger advances the cable release socket pin 6, the cocking lever 7, and the cocking latch 9 which is connected with the latter. An integral cam 9a of the cocking latch 9 comes to rest against the angular stop plate 35, and when actuated moves the driving lever 13 radially towards the outside. In doing so the cam strikes the stop lug of the driving lever 13. The driving latch 14 riveted to the driving lever 13 is pressed by the closing spring 17 against the ring lever 16, and a recessed portion engages the driving lug; at the same time the brake latch 24, also riveted to the driving lever, slips past the driving lug of the brake lever 25. At the end of the cocking travel the cocking latch 9 disengages the driving lever 13, and pulled by the driving spring 21 the driving lever returns to its original position.

In returning, the brake latch 24 strikes the lug of the brake lever 25, and depending upon the setting has to overcome the braking action of the slow-speed gear train (see Speed Setting System page 7).

During the return travel of the driving lever 13, the driving latch 14 displaces the ring lever 16 and the driving ring 36 in positive engagement with the latter. The shutter blades open.

Just prior to reaching the resting position the brake lever 25 becomes disengaged, both brake latch 24 and driving lever 13 flip back, and the driving latch 14 returns the ring lever 16 and the driving ring 36 positively connected with the latter to their original positions.

b) Time Exposures

Independent of the selected shutter speed the shutter blades can be opened for any period of time, if the cable release is screwed into the cable release socket 1a.

A pressure on the cable release plunger causes the cable release socket pin 6a to strike the driving lug 37a of the shutter blade ring 37 and to displace the latter. The shutter blades open. If the cable release socket pin is allowed to return, the shutter blade ring 37 actuated by the shutter blade ring spring will follow immediately, and the shutter blades will close.

3. Dismantling and Reassembling

A. Dismantling the Shutter

After removing the four mounting screws of the shutter base the latter can be lifted off together with the diaphragm system. (For further details on the diaphragm system please see sheet 11).

The shutter mechanism is now accessible. The shutter blades can be lifted off directly, the shutter blade ring spring 10 can be unhooked, and the shutter blade ring 37 and the drive ring 36 can be removed. The remaining shutter dismantling operations are relatively easy, and will be described in some cases in the descriptions of the individual systems.

Note:

Should it become necessary to replace the front plate, the setting ring or the notched speed lever, the front plate ring must be removed. The stock number of the front plate ring wrench is MV 100.

B. Reassembling the Shutter

Important Note

As a general rule attention must be given to the fact that in reassembling the shutter no lever will be bent and no spring stretched, as otherwise the shutter will not function properly. Special attention must be given to the position of the cable release socket pin 6a, as this part will become loose when the shutter blade ring 37 is removed, and may slip out of the drilled hole of the cable release socket 10. Moreover, the driving spring 21 should not be hooked up on the second rivet of the adjusting lever 23 as shown in the illustration, but rather on the first rivet as viewed from the adjusting lever screw 22. Additional detailed assembly instructions will be given in the descriptions of the individual systems.

4. Cocking and Tripping System

The mode of operation of the cocking and tripping system has already been described in paragraph 2a. The following paragraphs contain instructions on the replacement of parts, on the assembly, and on the correction of defects.

a) Replacing
the cocking lever 7, the cocking latch 9, the angular stop plate 35, and the cocking lever spring 3.

By removing the two bearing bridge screws 5 and 11, the cocking lever 7 and the cocking latch 9, and after removing the screw 34, the angular stop plate 35 will become loose.

b) In assembling the shutter the angular stop plate 35 is first secured by means of the screw 34, then the cocking lever 7 and the cocking latch 9 are fitted with the cocking lever spring hooked up on the cocking lever 7. Place the two spacing bushings over the

threaded holes, pretension the cocking latch spring 12, and stick it over the spacing bushing. Hold down the cocking latch spring 12 and the spacing bushing by means of one finger, fit the bearing bridge 8, and secure it in position by means of the two screws 5 + 11. Then the cocking latch spring 12 is placed underneath the cocking latch 9 where it must rest against the spring rivet.

Defect	Cause	Correction
1. Shutter does not cock, release has no resistance at all, or very little.	a) Cocking lever spring 3 is unhooked.	a) Hook up the cocking lever spring 3.
	b) Cocking lever spring 3 is extended.	b) Install new cocking lever spring (for this purpose the cocking lever 7 must be removed).
	c) Cocking-latch spring 12 does not rest against the spring rivet of the cocking latch 9, but against the nozzle of the housing.	c) Pull the cocking latch spring 12 along the base of the housing and hold it by means of a pair of tweezers (at the ring lever 16). Make the cocking latch 9 rest against the nozzle, but make sure that the spring rivet will slip over the spring 12. Lift the spring lightly and let it strike against the rivet.

Defect	Cause	Correction
2. Shutter cocks but does not trip.	a) Closing spring 17 is unhooked from the driving latch 14.	a) Hook the closing spring 17 on the spring rivet of the driving latch 14.
	b) Ring lever 16 is not located in the recessed portion of the driving ring 36.	b) Install the driving ring 36 properly (see shutter blade system).
	c) The slide cam 9a is too steep, so that the driving latch cannot get caught in position.	c) Bend slide cam slightly by means of a pair of tongs.
3. The shutter set for slower instantaneous speeds produces faster speeds, i.e. (although set for 1 sec) the shutter blades close instantly after opening.	The driving latch spring 20 does not rest against the spring rivet.	Make driving latch spring 20 rest against the spring rivet.

5. Slow-Speed Assembly and Speed Setting System

Rotating the setting ring controls both the engagement of the brake lever 25, and the engagement and disengagement of the escapement. The escapement is engaged when the shutter is set for any of the following speeds: 1, 1/2, 1/4 and 1/8 sec; it is disengaged when the shutter is set for any of the following speeds: 1/15, 1/30, 1/60 and 1/125 sec.

The control cam of the setting ring serves to set the angular position of the brake lever 25 that governs the shutter speeds.

Time Exposures "B" - See Shutter Blade System.

The two fixing screws 30 + 33 in the lower bearing plate secure the slow speed assembly 31 in the shutter. The slow-speed assembly can only be removed from the shutter after the brake lever 25 has previously been removed.

For assembling the slow-speed assembly the setting ring has to be rotated all the way to the right to the 1 sec position, then the slow-speed assembly can be installed and secured by screws. Press the tie lever 29 on the post of the gear segment, place the washer on the threaded hole, slide the brake lever over it, and secure it by means of the retaining screw 26. After the brake lever spring 27 is hooked up, the slow-speed assembly is ready to operate.

Note:

In fitting the setting ring give special attention that the escapement rocker arm and the control rivet of the gear segment that project through the base of the housing will come to rest in the recessed portions of the setting ring.

Defect	Cause	Correction
1. Shutter produces faster speeds than the slower speeds set. Please also see defect 3 and Cocking and Tripping System.	Brake lever 25 is not engaged; brake lever spring is unhooked.	Hook up brake lever spring 27.
2. Shutter speeds are slower than indicated in the program.	a) Brake lever 25 does not move easily, no washer has been fitted.	a) Remove the brake lever 25, and reinstall it together with a washer.
	b) Dirt inside the slow-speed assembly.	b) Replace the slow-speed assembly by a new one.

Note:

The shutter speeds can be adjusted in relation to each other by swadging or filing the control cam of the setting ring. The shutter speeds can only be accurately examined by means of a shutter speed measuring instrument.

6. Shutter Blade System

When the shutter completes its cycle the rivet 96 locks the shutter blade ring 37 against shifting, whereas the drive ring 36 is briefly advanced and returned by the ring lever 16. The rotation is limited by the recesses in the drive ring 36, and in the shutter blade ring 37, and by the stop screw 32.

a) Time Exposures "B"

When the shutter is tripped by use of the cable release socket 1a, the cable release socket pin 6a strikes the drive lug 37a of the shutter blade ring and displaces the latter. In doing so the shutter blades are opened, and when the pressure of the cable release crown is eased, the shutter blade ring spring 10 returns the shutter blade ring 37 to its starting position, - the shutter blades close. As the locking abutment 37b of the shutter blade ring is rotated in front of the rivet 9b, the shutter is prevented from giving an instantaneous speed at the same time. On the other hand when the shutter is used for instantaneous speeds, the rivet 9b prevents simultaneous time exposures, because when the shutter completes its cycle this rivet slides in front of the locking abutment 37b.

b) In fitting the drive ring 36 attention must be given to the fact that the ring lever 16 will slip into the recess provided for it, and that the contact arm 36a will not be pushed in between the flash contact spring 28 and the flash contact nipple (please also see flash contact system). After that, by use of a pair of tweezers the closing spring 17 is slipped through underneath the spring rivet of the drive ring 36 and is placed in position.

The shutter blade ring 37 must first be slipped under the head of the shutter blade ring screw 2, and can then be pushed on the nozzle of the housing. Use a pair of tweezers to hook the shutter blade ring spring 10 on the drive lug 37a. Then the shutter blades are fitted in such a way that the rivets of the driving ring 36, and of the shutter blade ring 37 will slip into the drilled holes of the shutter blades. Mount the shutter base with the diaphragm system in such a way that the shutter blade ring screw 2 will fit into the recesses in the base, and secure it by means of 4 screws.

Defect	Cause	Correction
1. Shutter blades do not form a light-tight closure of the shutter opening.	a) In assembling a new drive ring 36, or a shutter blade ring 37 it is noted that the recesses for the stop screw 32 are too large.	a) Reduce the recesses 36c and 37c by swadging.
	b) Shutter blades are bent.	b) Replace shutter blades.
2. Shutter blades rusty.		Replace shutter blades.

Note:

The shutter blades and diaphragm blades must be handled with particular care. Bent parts must be replaced by new ones. The shutter blades and diaphragm blades must be protected against fingerprints which are apt to lead to the formation of rust. As a general rule parts that are not in perfect condition must be replaced, and only in cases where no replacements are available the fingerprints should be removed with a clean cloth. Make sure to place the shutter blades and diaphragm blades on a flat surface for cleaning.

Diaphragm blades and shutter blades should never be lubricated.

7. Diaphragm System

After lifting off the diaphragm covering disc secured by means of three screws, the diaphragm blades are freely accessible.

Assembly

Insert the pointer arm of the diaphragm pointer disc into the slot of the base, place it into the annular recess, and rotate it counter-clockwise right to the stop. Fit the diaphragm blades in such a way that the rivets will come to rest in the drilled holes provided in the diaphragm pointer disc. Fit the spring ring centrically, and place on the diaphragm covering disc, but make sure that the diaphragm blade rivets come to rest in the drilled holes; this can easily be attained by a very slight forward and backward rotation of the diaphragm pointer disc. The three mounting screws secure the diaphragm system in the shutter base.

Defect	Cause	Correction
The diaphragm pointer disc does not move easily.	a) The diaphragm pointer disc or the diaphragm covering disc are bent.	a) Install new flat discs.
	b) The diaphragm blades are damaged.	b) Replace the diaphragm blades.

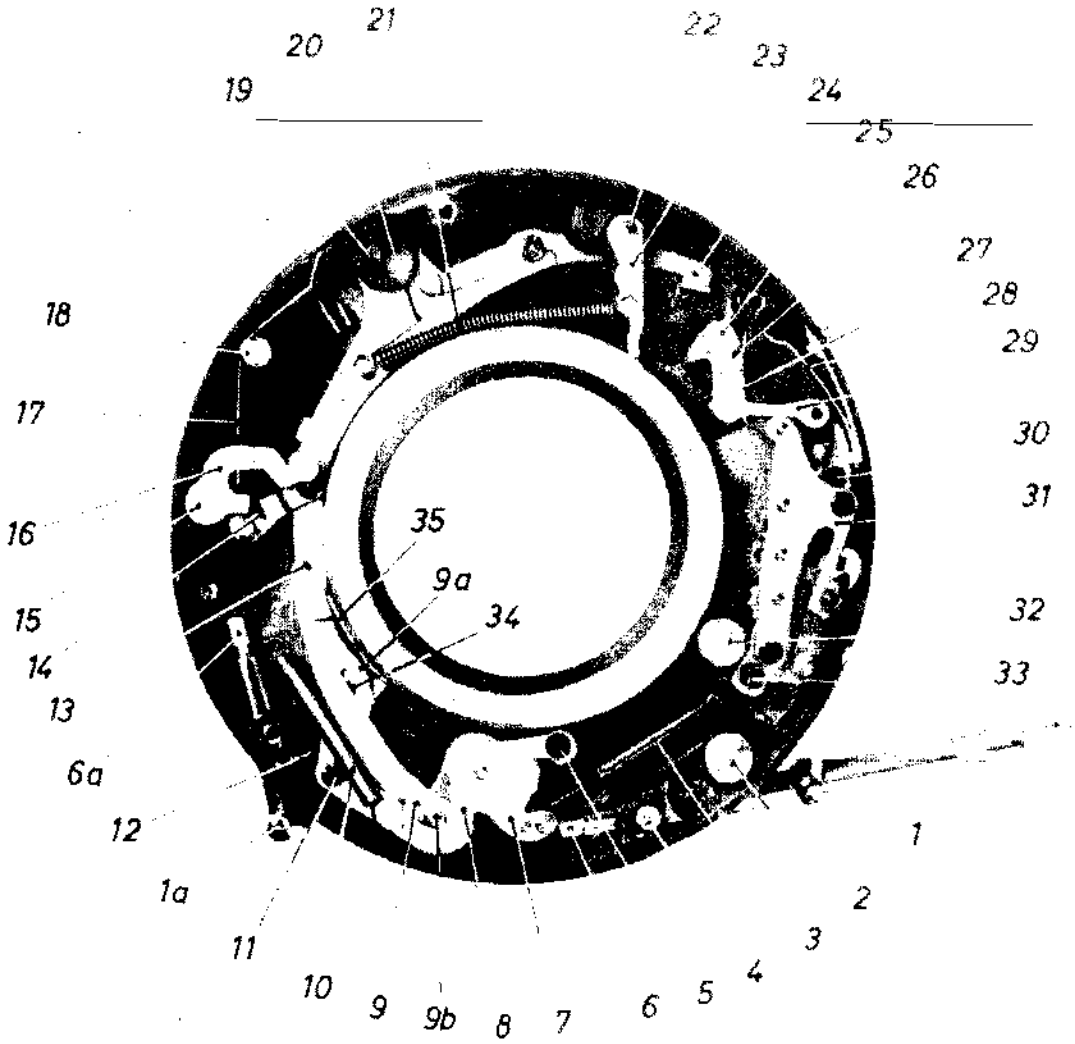
8. Flash Contact System

The shutter has X synchronization, which means that the contact is made when during the opening cycle of the shutter the shutter blades still project into the shutter opening for about 1.5 to 2 mm.

When the shutter completes its cycle, the contact arm 36a of the drive ring presses the flash contact spring 28 against the flash contact nipple and thus creates a conducting connection.

Defect	Cause	Correction
1. The flashgun does not fire despite the fact that it is in good working order.	a) There is no contact made due to the fact that the contact arm 36a is bent.	a) Adjust the contact arm 36a, or replace the drive ring 36.
	b) The drive ring is not mounted properly; the contact arm 36a is located between the flash contact spring 28 and the contact pin.	b) Install the drive ring in such a way that the contact arm 36a when displaced pushes the flash contact spring 28 against the flash contact nipple.
	c) Flash contact spring 28 is bent.	c) Adjust the flash contact spring 28.
2. The contact is not made at the correct position of the shutter blades.	Contact arm 36a is bent.	See 1a.

I JRX 5p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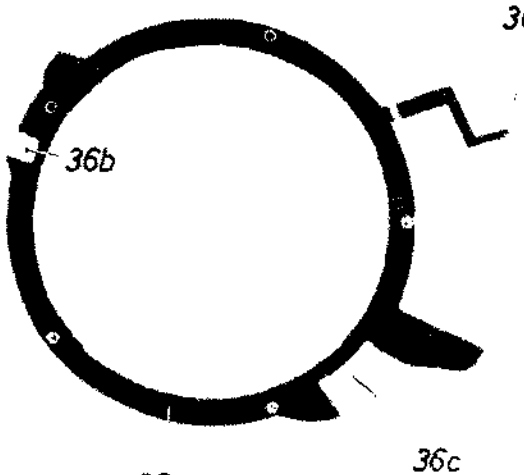
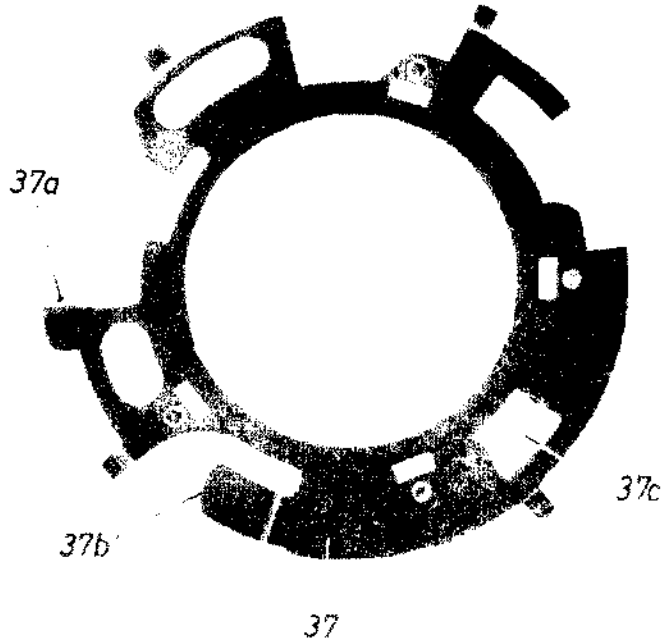
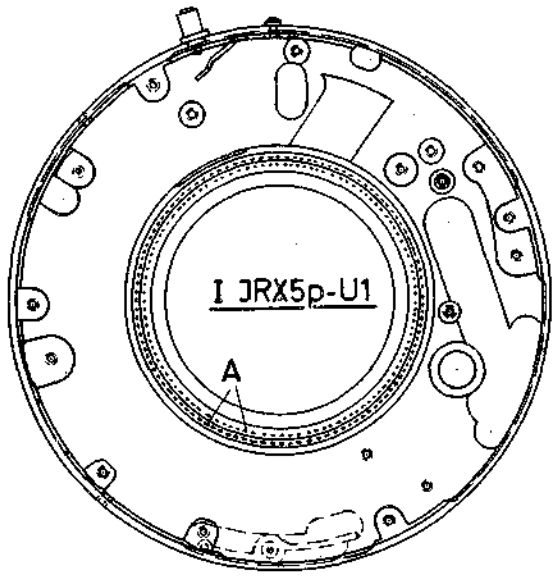
35
9a
34


36a
36b
36c
36


37a
37c
37b
37

Lubricating Diagram
for the
PRONTOR IJRX5p Shutter



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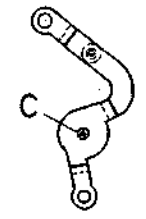

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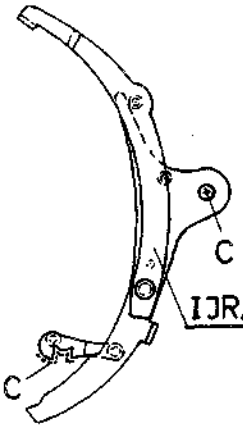

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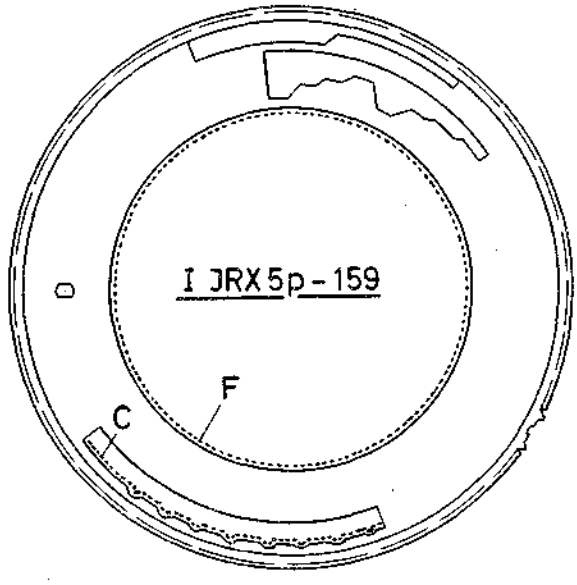
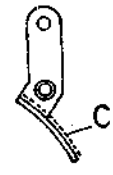
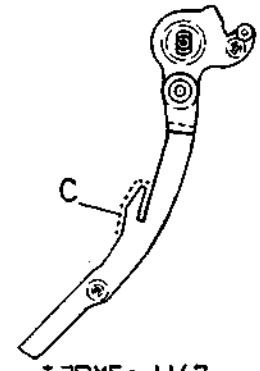




IJRX5-131



IJRX5p-U47

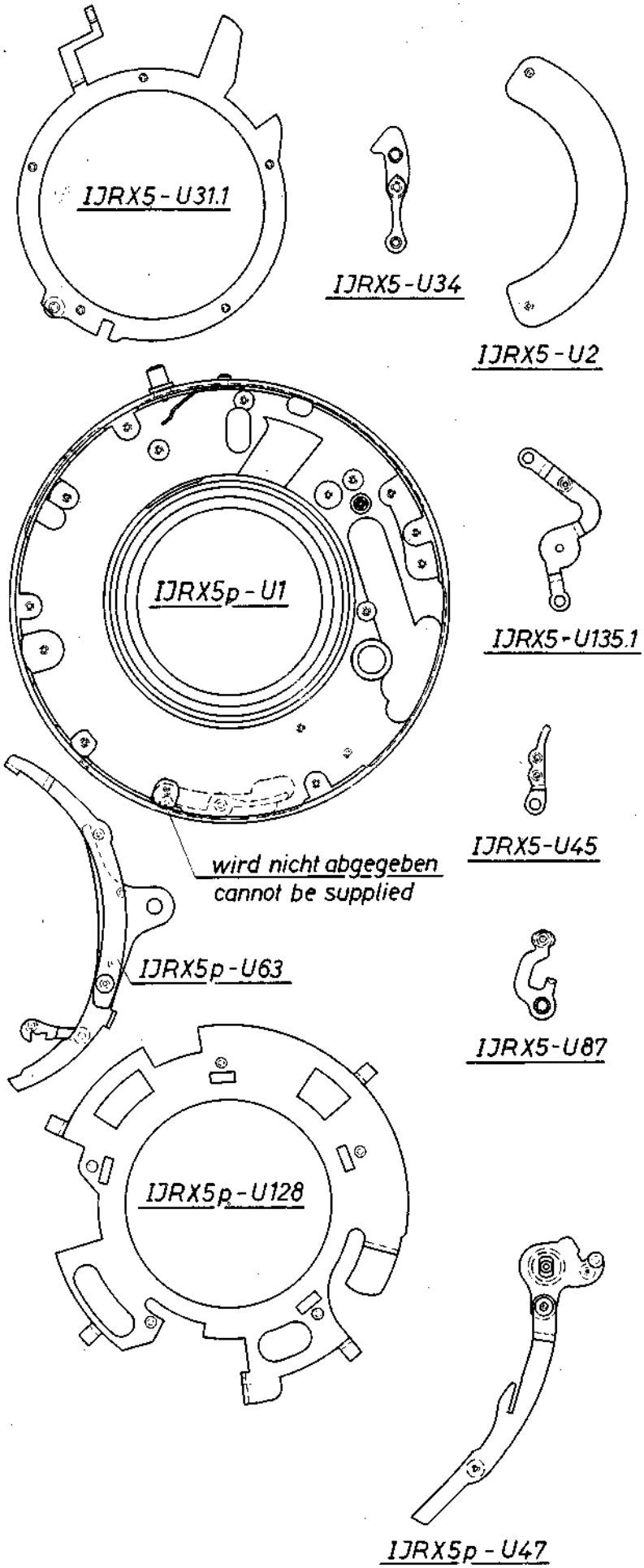
A = Molykote paste micro fine
C = Molykote paste BR 2
F = Losoid 1164

The points to be lubricated are marked in red. The letters designate the type of lubricant to be used.

Alfred Gauthier G.m.b.H. Calmbach a. d. Enz	PRONTOR-PRESS IJRX5 p Optik / Lens : Ysaron 1:4,5 /75 Kamera : Copy - Camera	Liste best. aus Bl. 1 - 5	Bl. Nr. 1
		Gefertigt 20. 3. 62 fe.	Gepr.
		Anz. der Änd.-Bl. 1 - 7	

Teil Nr.:	Teilbenennung:
IJRX5 - U31.1	Antriebring
	drive ring
IJRX5 - U34	Bremshebel
	brake lever
IJRX5 - U2	Irislamelle
	diaphragm blade
IJRX5p - U1	Kapsel
	housing
IJRX5-U135.1	Lagerbrücke
	bearing bridge
IJRX5 - U45	Regulierhebel
	adjusting lever
IJRX5 - U87	Ringhebel
	ring lever
IJRX5p-U128	Sektorenring
	shutter blade ring
IJRX5p-U47	Spannhebel
	cocking lever
IJRX5p-U63	Treibhebel
	drive lever

Teil:

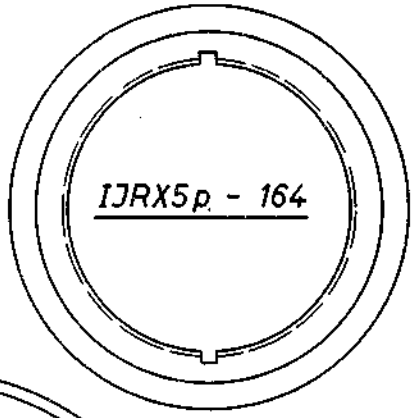


Alfred Gauthier G.m.b.H. Calmbach a. d. Enz	PRONTOR-PRESS IJRX5 p	Liste best. aus Bl.	Bl. Nr. 2
		Gefertigt 20.3.62 fe.	Gepr.
		Anz. der Änd.-Bl.	

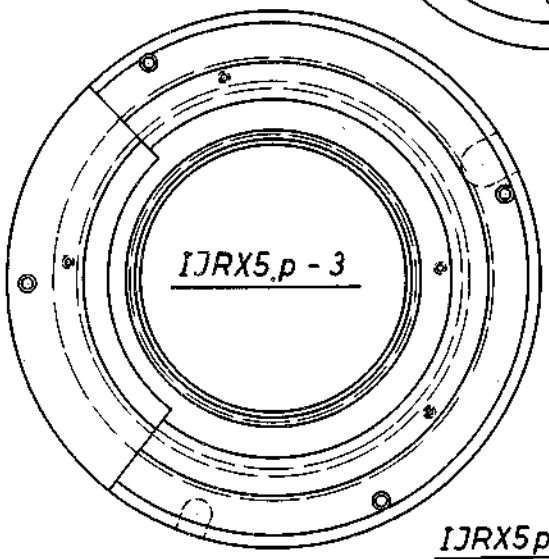
Teil Nr.:	Teilbenennung:
IJRX5 - 131	Anschlagwinkel
	angular stop plate
IJRX5p - 164	Anschraubring
	flange
IJRX5p - 3	Boden
	bottom
IJRX5p-134	Einstellbogen
	scale band
IJRX5p-159	Einstellring
	speed setting ring
IJRX5p-591	Federring
	spring ring
IJRX5p-239	Frontplattenring
	front plate ring

Teil:

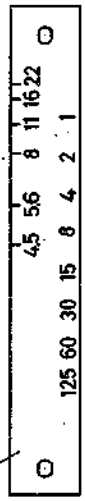
IJRX5 - 131



IJRX5p - 164



IJRX5p - 3



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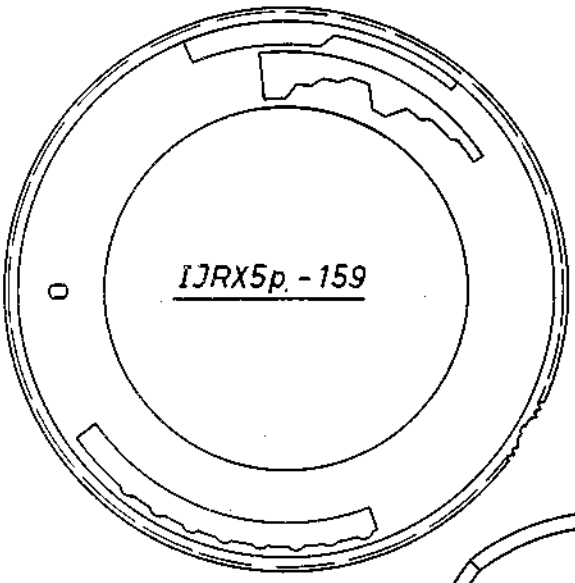

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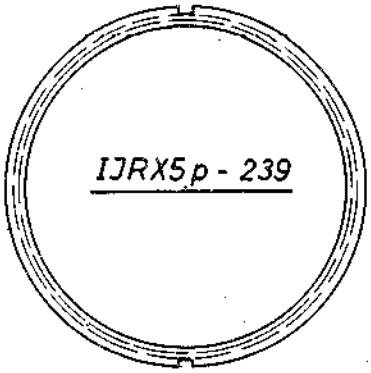

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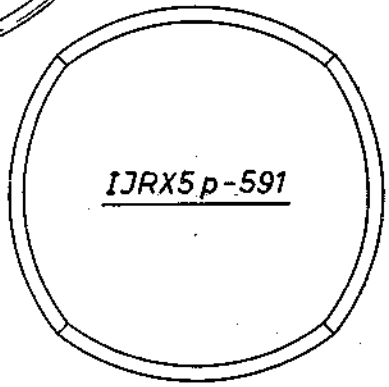
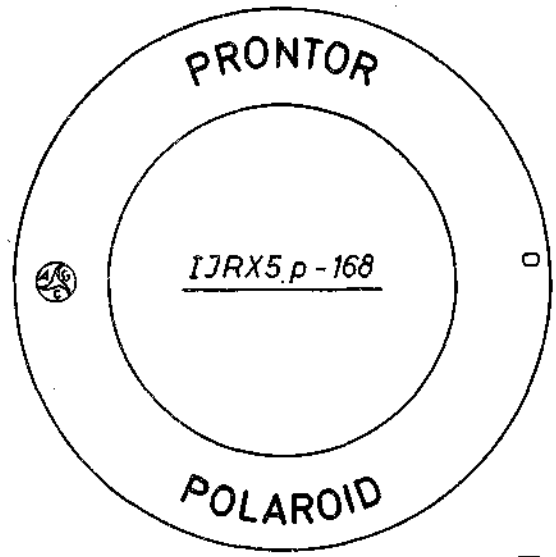


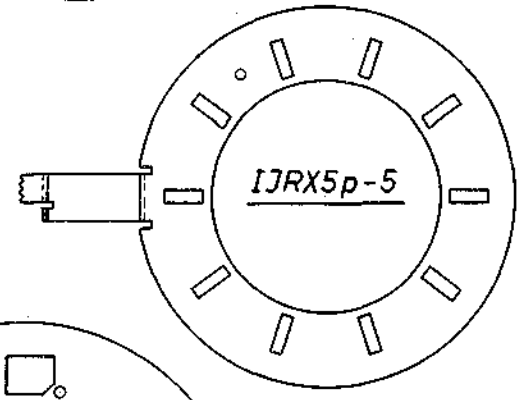
IJRX5p - 591

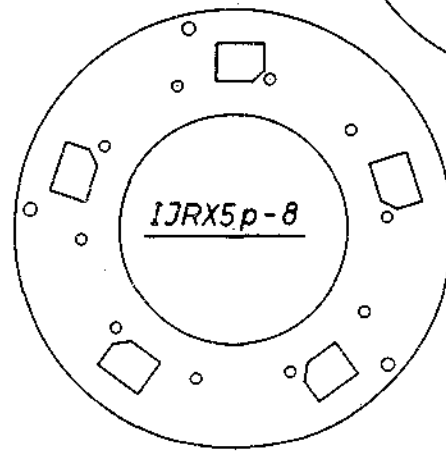
Alfred Gauthier G.m.b.H. Calmbach a. d. Enz	PRONTOR - PRESS IJRX5 p	Liste best. aus Bl.	Bl. Nr. 3
		Gefertigt 20.3.62	Gepr.
		Anz. der Änd.-Bl.	

Teil Nr.:	Teilbenennung:
IJRX5p - 168	Frontplatte
	front plate
IJRX5p - 5	Iriszeigerscheibe
	diaphragm pointer disc
IJRX5p - 8	Irisdeckscheibe
	diaphragm covering disc
IJRX5 - 61	Sektor 5 Stück
	shutter blade 5 pcs.
OJRX5 - 78	Unterlegscheibe
	washer
IJRX5p-G10	Hemmwerk
	slow speed assembly

Teil:

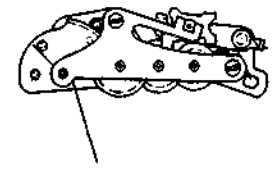






IJRX5-61

OJRX5-78



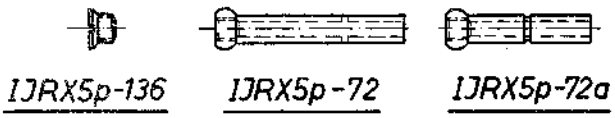
IJRX5p-G10

wird nur als Ganzes abgegeben
only complete assembly can be supplied

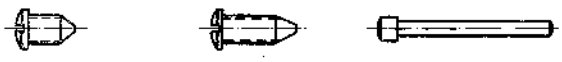
Alfred Gauthier G.m.b.H. Calmbach a. d. Enz	PRONTOR-PRESS IJRX5 p	Liste best. aus Bl.	Bl. Nr. 4
		Gefertigt 20. 3. 62	Gepr.
		Anz. der Änd.-Bl.	

Teil Nr.:	Teilbenennung:
IJRX5p - 136	Anschlagwinkelschr.
	angular stop plate screw
IJRX5p - 72	Auslösrohr A
	cable release socket A
IJRX5p - 72a	Auslösrohr B
	cable release socket B
JRO - 73	Auslösrohrschr.
	cablerelease socket screw
IJRX5p - 73a	Auslösrohrschr.
	cable release socket screw
IJRX5p - 74	Auslösstift A
	cable release socket pin
IJRX5p - 74a	Auslösstift B
	cable release socket pin
IJRX5p - 94	Antriebring-Anschlagschr.
	drive ring stop screw
3114 - 20 - 3220	Bremshebelschr.
	brake lever screw
1217 - 32 - 2110	Bodenschr. 2 Stück
	bottom screw 2 pcs.
OJRX5 - 136	Distanzbüchse 2 Stück
	distance bushing 2 pcs.
1217 - 16 - 1433	Deckscheibenschr. 3 Stck
	cocer disc screw 3 pcs.
1217 - 12 - 1433	Einstellbogenschr. 2 Stck.
	scale band screw 2 pcs.
1614 - 12 - 7110	Fixierschraube
	locating screw
1014 - 20 - 2110 1517 - 20 - 1110	Hemmwerkschr.
	slow speed assembly scr.
0304u - 223	Lagerbrückenschr. lang
	bearing bridge scr. long
1517 - 32 - 2116	Lagerbrückenschr. kurz
	bearing bridge scr. short
IJRX5 - 88	Ringhebelschr.
	ring lever screw
1217 - 22 - 2130	Regulierhebelschr.
	adjusting lever screw
IJRX5p - 130	Sektorenringschr.
	shutter blade ring scr.
OJR10 - 102	Treibhebelschr.
	drive lever screw
JRO - 108	Zuziehfederschr.
	closing spring screw

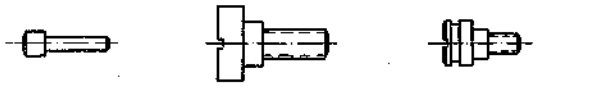
Teil:



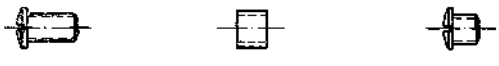
IJRX5p-136 IJRX5p-72 IJRX5p-72a



JRO - 73 IJRX5p-73a IJRX5p - 74

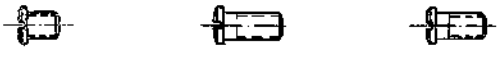


IJRX5p-74a IJRX5p-94 3114-20-3220

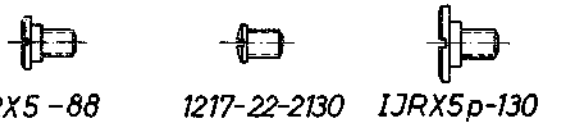


1217-32-2110 OJRX5-136 1217-16-1433

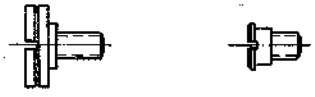
1217-12-1433 1614-12-7110 1014-20-2110



1517-20-1110 0304u-223 1517-32-2116



IJRX5-88 1217-22-2130 IJRX5p-130

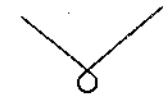


OJR10-102 JRO-108

Alfred Gauthier G.m.b.H. Calmbach a. d. Enz	PRONTOR-PRESS IJRX5 p	Liste best. aus Bl.	Bl. Nr. 5
		Gefertigt 20.3.62 fe.	Gepr.
		Anz. der Änd.-Bl.	

Teil Nr.:	Teilbenennung:
JRI - 64	Bremsklinkenfeder
	brake latch spring
IJRX5p -133	Sektorenringfeder
	shutter blade ring spring
IJRX5 - 93	Spannklinkenfeder
	cocking latch spring
IJRX5 - 52	Spannhebelfeder
	cocking lever spring
IJRX5 - 103	Treibfeder
	drive spring
JRI - 107	Zuziehfeder
	closing spring

Teil:



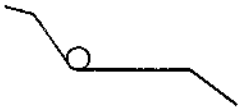
JRI - 64

IJRX5p-133

IJRX5-93

IJRX5-52

IJRX5-103



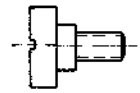
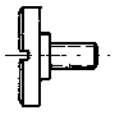
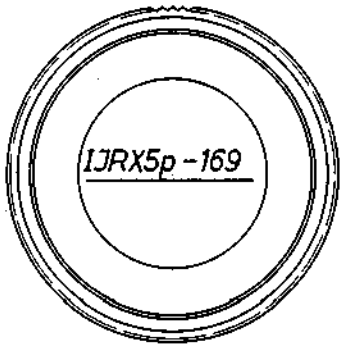
JRI-107

Alfred Gauthier G. m. b. H.
Calmbach a. d. Enz

PRONTOR-PRESS IJRX5p

Geänderte Teile
Changed parts

Liste besteht aus Blatt 1 - 7
Blatt Nr. 1 | Gepr.
Gefertigt: 20.3.62 fe.

Lfd.Nr.	Teil Nr.:	Teilbenennung:	Teil:
1			
	Änderung Nr. 2525 Change Nr. 2525		
2	IJRX5p - 94.1	Antriebring-Anschlagschr an Stelle v. IJRX5p-94	 IJRX5p-94.1
		drive ring stop screw inst. of IJRX5p - 94	
3			
	Änderung Nr. 2566, 3301, 3410 Change Nr. 2566, 3301, 3410		
4	IJRX5p - 73	Gewindestift 3 Stück an Stelle v. IJRX5p-73a	 IJRX5p-73
		threaded pin 3 pcs. inst. of IJRX5p - 73a	
5	1517-20-1110	Bodenschr. 2 Stück	 1517-20-1110
		bottom screw 2 pcs.	
6			
	Änderung Nr. 2860 Change Nr. 2860		
7	OJR10 - 102.1	Treibhebelschr. an Stelle v. OJR10-102	 OJR10 - 102.1
		drive lever screw inst. of OJR10-102	
8			
	Änderung Nr. 2929 Change Nr. 2929		
9	IJRX5p - 169	Lichtdämpfring auf besondere Bestellung	 IJRX5p-169
		light baffle ring upon special request	
10			

Änderungszustand dieses Blattes

Änd. Nr.	Lfd. Nr.	Tag u. Name	Änd. Nr.	Lfd. Nr.	Tag u. Name	Änd. Nr.	Lfd. Nr.	Tag u. Name
2525	2	20.3.62						
2566	4, 5	" "						
2860	7	26.8.63						
2929	9	" "						

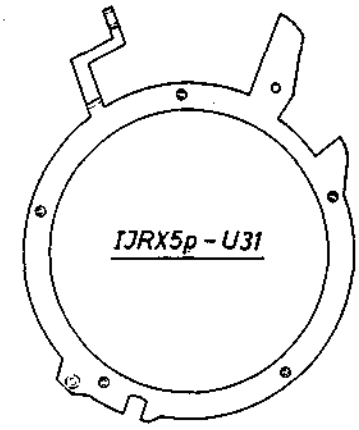
Alfred Gauthier G. m. b. H.
Calmbach a. d. Enz

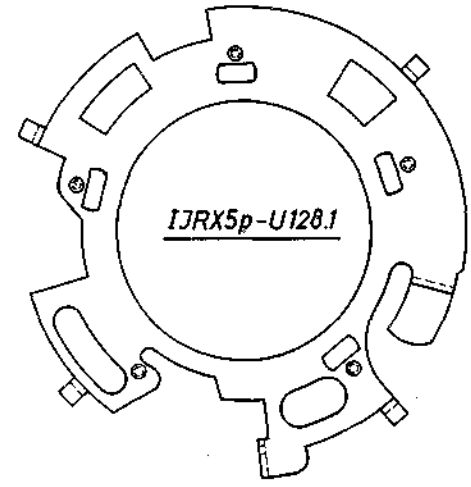
PRONTOR-PRESS IJRX5p Geänderte Teile / Changed parts

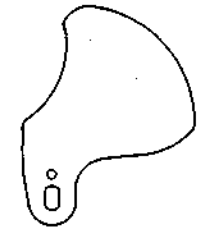
Liste besteht aus Blatt .....
Blatt Nr. 2 | Gepr. .....
Gefertigt: 27. 8. 63 He.

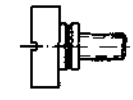
Lfd.Nr.	Teil Nr.:	Teilbenennung:
1		
	Änderung Nr. 2950 / Change Nr. 2950	
2	IJRX5p-U31	Antriebring an Stelle v. IJRX5-U31.1
		drive ring inst. of IJRX5-U31.1
3	IJRX5p-U128.1	Sektorenring an Stelle v. IJRX5p-U128
		shutter blade ring inst. of IJRX5p-U128
4	IJRX5p-61	Sektor an Stelle v. IJRX5-61
		shutter blade inst. of IJRX5-61
5		
	Änderung Nr. 3171 / Change Nr. 3171	
6	IJRX5p-94.2	Antriebring-Anschlagschr. wahlweise zu IJRX5p-94.1
		drive ring stop screw optionally to IJRX5p-94.1
7		
	Änderung Nr. 3233 / Change Nr. 3233	
8	1517-20-1110	Deckscheibenschr. 3 Stck. an Stelle v. 1217-16-1433
		cover disc screw 3pcs inst. of 1217-16-1433
9		
	Änderung Nr. 3409a / Change Nr. 3409a	
10	JRI-107.1	Zuziehfeder an Stelle v. JRI-107
		closing spring inst. of JRI-107

Teil:

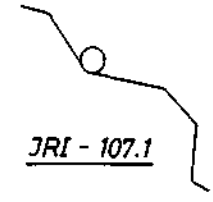

IJRX5p-U31


IJRX5p-U128.1


IJRX5p-61


IJRX5p-94.2

1517-20-1110

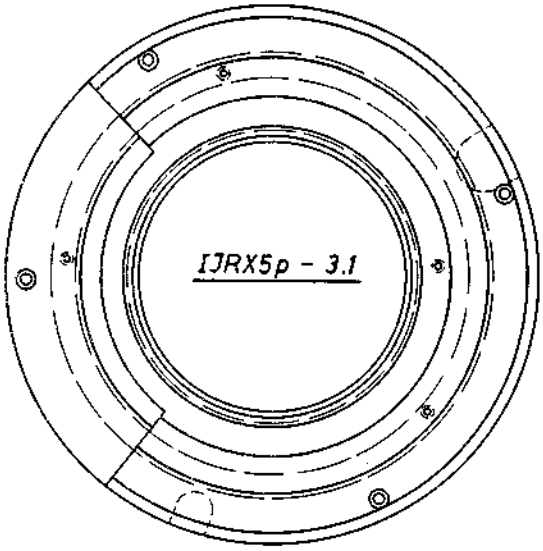

JRI-107.1

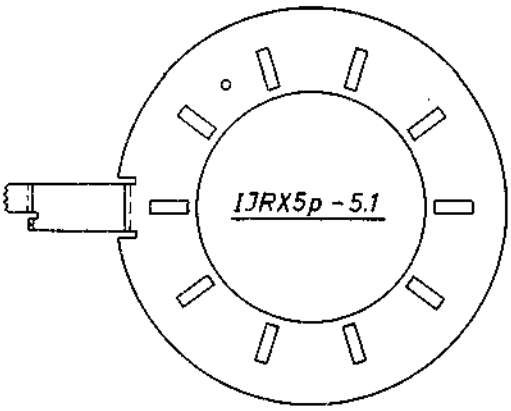
Änderungszustand dieses Blattes

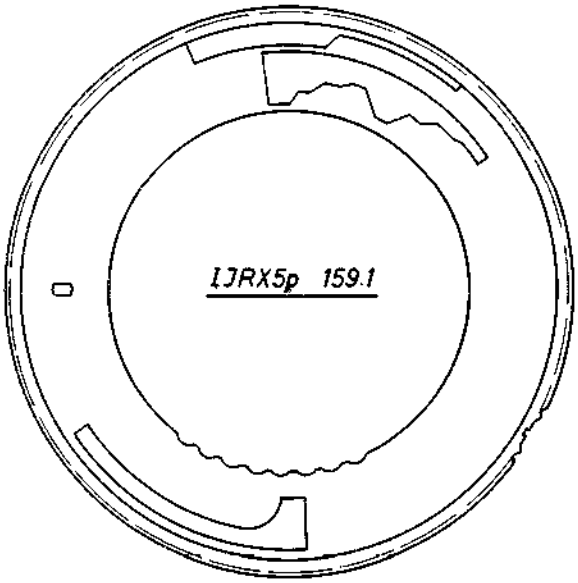
Änd. Nr.	Lfd. Nr.	Tag u. Name	Änd. Nr.	Lfd. Nr.	Tag u. Name	Änd. Nr.	Lfd. Nr.	Tag u. Name
2950	2,3,4	27.8.63						
3171	6	" " "						
3233	8	" " "						
3409a	10	" " "						

Alfred Gauthier G. m. b. H. Calmbach a. d. Enz	PRONTOR-PRESS IJRX5p Geänderte Teile / Changed parts	Liste besteht aus Blatt .....
		Blatt Nr. 3 | Gepr. .....
		Gefertigt: 27.8.63 K.

Lfd.Nr.	Teil Nr.:	Teilbenennung:	Teil:
1			
	Änderung Nr. 3463 Change Nr. 3463		
2	IJRX5p - 3.1	Boden an Stelle v. IJRX5p-3	
		bottom inst. of IJRX5p-3	
3			
	Änderung Nr. 3464 Change Nr. 3464		
4	IJRX5p - 5.1	Iriszeigerscheibe an Stelle v. IJRX5p-5	
		diaphragm pointer disc inst. of IJRX5p-5	
5			
	Änderung Nr. 3557 Change Nr. 3557		
6	IJRX5p- 159.1	Einstellring an Stelle v. IJRX5p-159	
		speed setting ring inst. of IJRX5p-159	
7			
	Änderung Nr. 3558 Change Nr. 3558		
8	IJRX5p -U1.1	Kapsel ohne Skizze wird nicht abgegeben an Stelle v. IJRX5p-U1	
		housing without sketch cannot be supplied inst. of IJRX5p-U1	
9			
10			







Änderungszustand dieses Blattes

Änd. Nr.	Lfd. Nr.	Tag u. Name	Änd. Nr.	Lfd. Nr.	Tag u. Name	Änd. Nr.	Lfd. Nr.	Tag u. Name
3463	2	27.8.63						
3464	4	" " "						
3557	6	" " "						
3558	8	" " "						

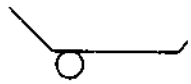
Alfred Gauthier G. m. b. H.
Calmbach a. d. Enz

PRONTOR-PRESS IJRX5p

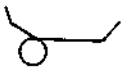
Geänderte Teile
Changed parts

Liste besteht aus Blatt .....
Blatt Nr. 4 | Gepr. .....
Gefertigt: 27.8.63 fe.

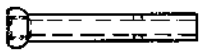
Lfd.Nr.	Teil Nr.:	Teilbenennung:	Teil:
1			
	Änderung Nr. 3625 Change Nr. 3625		
2	IJRX5 - 70	Treibklinkenfeder an Stelle v. JRI-107.1	
		driving latch spring inst. of JRI-107.1	
3	IJRX5 - 107	Antriebringfeder an Stelle v. JRI-107.1	
		drive ring spring inst. of JRI-107.1	
4			
	Änderung Nr. 3635 Change Nr. 3635		
5	1-12p-123	Auslösrohr „A" an Stelle v. IJRX5p-72	
		cable release socket „A" inst. of IJRX5p-72	
6			
	Änderung Nr. 3696 Change Nr. 3696		
7	122 02	Antriebring-Anschlagschr an Stelle v. IJRX5p-94.1	
		drive ring stop screw inst. of IJRX5p-94.1	
8	122 03	Antriebring-Anschlagschr. an Stelle v. IJRX5p-94.2	
		drive ring stop screw inst. of IJRX5p-94.2	
9			
	Änderung Nr. 3714 Change Nr. 3714		
10	0376y - 362	Zeit - Rastenfeder	
		click stop spring	



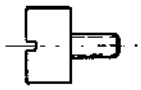
IJRX5 - 70



IJRX5 - 107

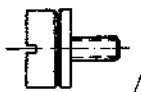


1 - 12p - 123



122 02

wahlweise
optionally



122 03

0376y - 362

Änderungszustand dieses Blattes

Änd. Nr.	Lfd. Nr.	Tag u. Name	Änd. Nr.	Lfd. Nr.	Tag u. Name	Änd. Nr.	Lfd. Nr.	Tag u. Name
3625	2, 3	27.8.63						
3635	5	" " "						
3696	7, 8	" " "						
3714	10	" " "						

Alfred Gauthier G. m. b. H.
Calmbach a. d. Enz

PRONTOR-PRESS IJRX5p

Geänderte Teile
Changed parts

Liste besteht aus Blatt .....
Blatt Nr. 5 | Gepr. .....
Gefertigt: 27. 8. 63 fe.

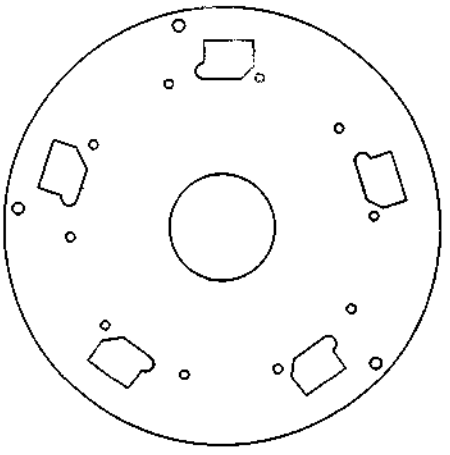
Lfd.Nr.	Teil Nr.:	Teilbenennung:	Teil:
1			
	Änderung Nr. 3988 Change Nr. 3988		
2	I - 13 - 464	Distanzbüchse 2 Stck. an Stelle v. 0JRX5-136	
		distance bushing 2 pcs. inst. of 0JRX5-136	
3	IJRX5 - U135.2	Lagerbrücke an Stelle v. IJRX5-U135.1	
		bearing bridge inst. of IJRX5-U135.1	
4	109 05	Lagerbrückenschr. lang an Stelle v. 0304u-223	
		bearing bridge scr. long inst. of 0304u-223	
5	103 07	Lagerbrückenschr. kurz an Stelle v. 1517-32-2116	
		bearing bridge scr. short inst. of 1517-32-2116	
6			
	Änderung Nr. 3073 Change Nr. 3073		
7	IJRX5p - 8	Irisdeckscheibe an St. v. IJRX5p-8 auf Bl.Nr.3	
	inst. of IJRX5p-8	diaphragm covering disc on sheet No. 3	
8			
	Änderung Nr. 3559 Change Nr. 3559		
9	I-12 - U 124	Auslösstift an Stelle v. IJRX5p-74	
		cable release socket pin inst. of IJRX5p - 74	
10			

I-13-464

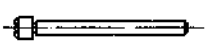
IJRX5-U135.2

109 05

103 07



IJRX5 – 8



I - 12 - U 124

Änderungszustand dieses Blattes

Änd. Nr.	Lfd. Nr.	Tag u. Name	Änd. Nr.	Lfd. Nr.	Tag u. Name	Änd. Nr.	Lfd. Nr.	Tag u. Name
3988	2, 3, 4, 5	27. 8. 63						
3073	7	" " "						
3559	9	16. 3. 65						

Alfred Gauthier G. m. b. H.
Calmbach a. d. Enz

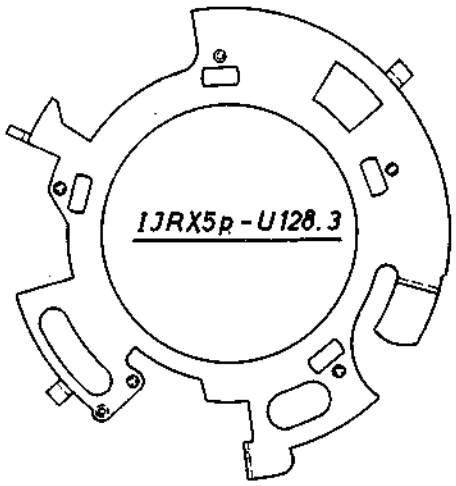
PRONTOR-PRESS IJRX5p

Geänderte Teile
Changed parts

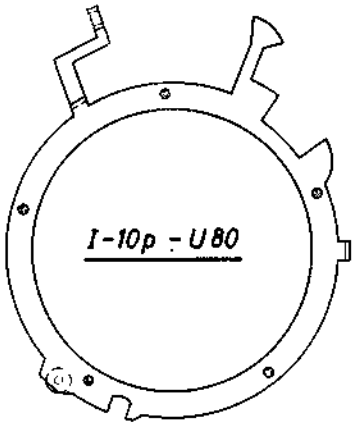
Liste besteht aus Blatt .....
Blatt Nr. 6 | Gepr. .....
Gefertigt: 18.3.65 fe.

Lfd.Nr.	Teil Nr.:	Teilbenennung:
1		
	Änderung Nr. 4650 / Change Nr. 4650	
2	IJRX5p-U128.3	Sektorenring an Stelle v. IJRX5p-U128.1
		shutter blade ring inst. of IJRX5p-U128.1
3		
	Änderung Nr. 4667 / Change Nr. 4667	
4	7 002 026	Auslösrohrschr. an Stelle v. JR0-73
		cable release socket screw inst. of JR0-73
5		
	Änderung Nr. 4695 / Change Nr. 4695	
6	I-10p-U80	Antriebring an Stelle v. IJRX5p-U31
		drive ring inst. of IJRX5p-U31
7	IJRX5p-U1.2	Kapsel ohne Skizze wird nicht abgegeben an Stelle v. IJRX5p-U1.1
		housing without sketch cannot be supplied inst. of IJRX5p-U1.1
8	I-10-U361	Lagerbrücke an Stelle v. IJRX5-U135.2
		bearing bridge inst. of IJRX5-U135.2
9	I-10-U85	Auslöser an Stelle v. IJRX5p-U47
		release inst. of IJRX5p-U47
10	7 002 228	Lagerbrückenschr. an Stelle v. 10905
		bearing bridge screw inst. of 10905

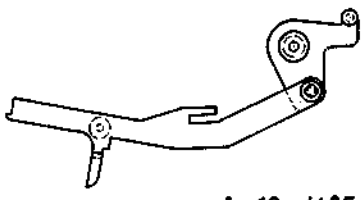
Teil:



7 002 026



I-10-U361



I-10-U85

7 002 228

Fortsetzung zu Änd. Nr. 4695 auf Blatt Nr. 7
continuation of change No. 4695 on sheet No. 7

Änderungszustand dieses Blattes

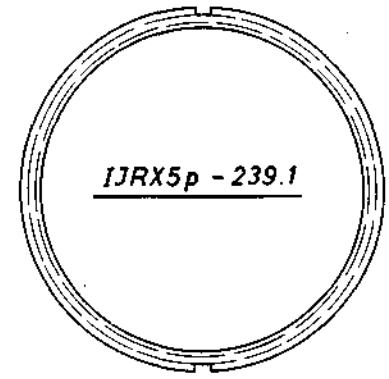
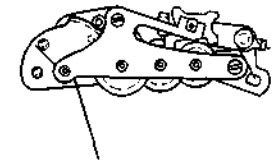
Änd. Nr.	Lfd. Nr.	Tag u. Name	Änd. Nr.	Lfd. Nr.	Tag u. Name	Änd. Nr.	Lfd. Nr.	Tag u. Name
4650	2	18.3.65						
4667	4	" "						
4695	6-10	" "						

Alfred Gauthier G. m. b. H.
Calmbach a. d. Enz

PRONTOR-PRESS IJRX5p

Geänderte Teile
Changed parts

Liste besteht aus Blatt .....
Blatt Nr. 7 | Gepr. .....
Gefertigt: 18.3.65 fe

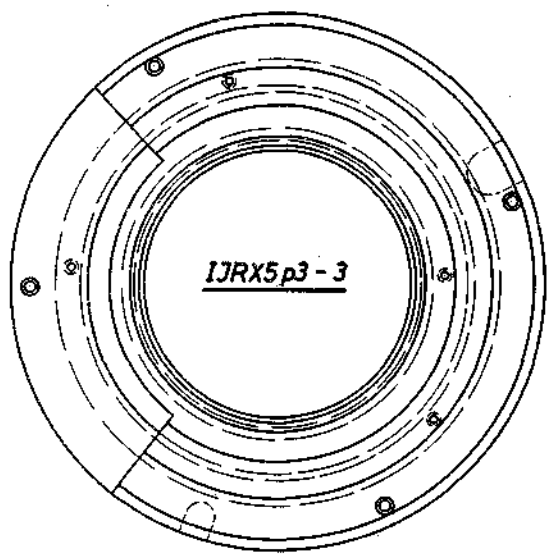
Lfd.Nr.	Teil Nr.:	Teilbenennung:	Teil:
1	I-10-130	Auslöserfeder an Stelle v. IJRX5-52	 I-10-130
		release spring inst. of IJRX5-52	
2			
	Änderung Nr. 4919 Change Nr. 4919		
3	IJRX5p-239.1	Frontplattenring an Stelle v. IJRX5p-239	 IJRX5p-239.1
		front plate ring inst. of IJRX5p-239	
4			
	Änderung Nr. 4982 Change Nr. 4982		
5	IJRX5-U34.1	Bremshebel an Stelle v. IJRX5-U34	 IJRX5-U34.1
		brake lever inst. of IJRX5-U34	
6			
	Änderung Nr. 5080, 5198 Change Nr. 5080, 5198		
7	I-12-G20	Hemmwerk an Stelle v. IJRX5p-G10	 I-12-G20 wird nur als Ganzes abgegeben only complete assembly can be supplied
		slow speed assembly inst. of IJRX5p-G10	
8	7 000 884	Hemmwerkschr. an Stelle v. 1014-20-2110	 7 000 884
		slow speed assembly scr. inst. of 1014-20-2110	
9			
	Änderung Nr. 5244 Change Nr. 5244		
10	I-12-U5	Irislamelle an Stelle v. IJRX5-U2	 I-12-U5
		diaphragm blade inst. of IJRX5-U2	

Änderungszustand dieses Blattes

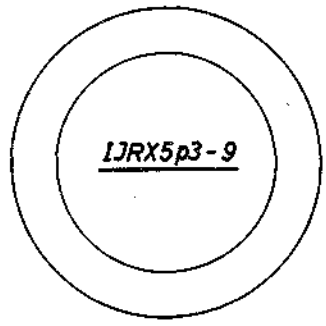
Änd. Nr.	Lfd. Nr.	Tag u. Name	Änd. Nr.	Lfd. Nr.	Tag u. Name	Änd. Nr.	Lfd. Nr.	Tag u. Name
4695	1	18.3.65	5244	10	18.3.65			
4919	3	" " "						
4982	5	" " "						
5080	7,8	" " "						

Alfred Gauthier G.m.b.H. Calmbach a. d. Enz	PRONTOR-PRESS IJRX5 p3 zu Modell IJRX5p to model IJRX5 p	Liste best. aus Bl. 1	Bl. Nr. 1
		Gefertigt 2.9.63 fe.	Gepr.
		Anz. der Änd.-Bl. 1,2	

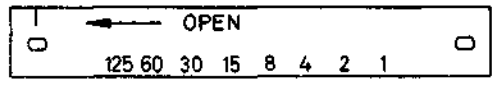
Teil Nr.:	Teilbenennung:	Teil:
IJRX5p3 - 3	Boden an Stelle v. IJRX5p - 3	
	bottom inst. of IJRX5p - 3	
IJRX5p3 - 9	Deckscheibe	
	cover disc	
IJRX5p3 - 134	Einstellbogen an Stelle v. IJRX5p - 134	
	scale band inst. of IJRX5p - 134	



IJRX5p3 - 3



IJRX5p3 - 9



IJRX5p3 - 134

Alfred Gauthier G. m. b. H.
Calmbach a. d. Enz

PRONTOR-PRESS IJRX5 p3

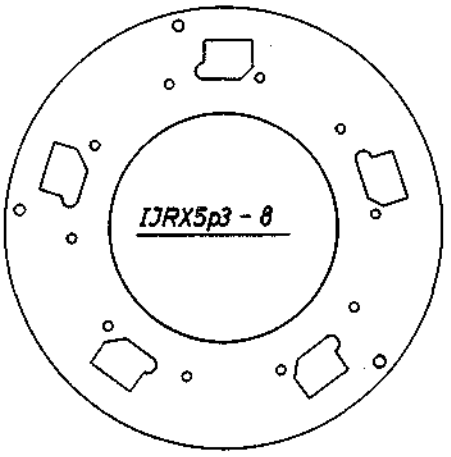
zu Modell IJRX5p — to model IJRX5p — Geänderte Teile — Changed parts

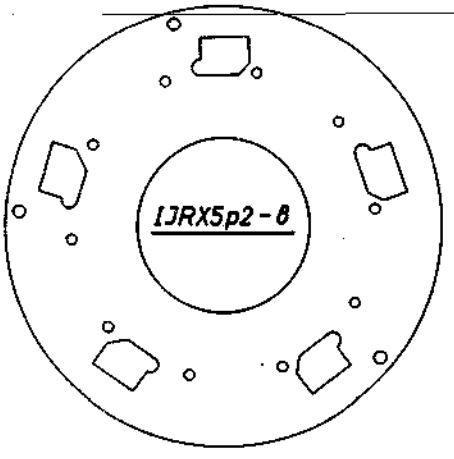
Liste besteht aus Blatt 1.2
Blatt Nr. 1 | Gepr. .....
Gefertigt: 2.9.63 K.

Lfd.Nr.	Teil Nr.:	Teilbenennung:	Teil:
1			
	Änderung Nr. 2950 Change Nr. 2950		
2	IJRX5 - U31.1 siehe Mod. IJRX5p Bl.1	Antriebring an Stelle v. IJRX5p - U31	
	see model IJRX5p on sheet 1	drive ring inst. of IJRX5p - U31	
3	IJRX5 - 61 siehe Mod. IJRX5p Bl.3	Sektor an Stelle v. IJRX5p-61	
	see model IJRX5p on sheet 3	shutter blade inst. of IJRX5p - 61	
4			
	Änderung Nr. 2963 Change Nr. 2963		
5	IJRX5p3 - 127	Anschlagplatte	
		stop plate	
6	1817-30 - 6400	Sektorenringschr. an Stelle v. IJRX 5p - 130	
		shutter blade ring screw inst. of IJRX5p - 130	
7			
	Änderung Nr. 3074 Change Nr. 3074		
8	IJRX5p3 - 8	Irisdeckscheibe an Stelle v. IJRX5p - 8	
		diaphragm covering disc inst. of IJRX5p - 8	
9			
	Änderung Nr. 3340 Change Nr. 3340		
10	IJRX5p2 - 8	Irisdeckscheibe an Stelle v. IJRX5p3 - 8	
		diaphragm covering disc inst. of IJRX5p3 - 8	

IJRX5p3-127

1817-30-6400



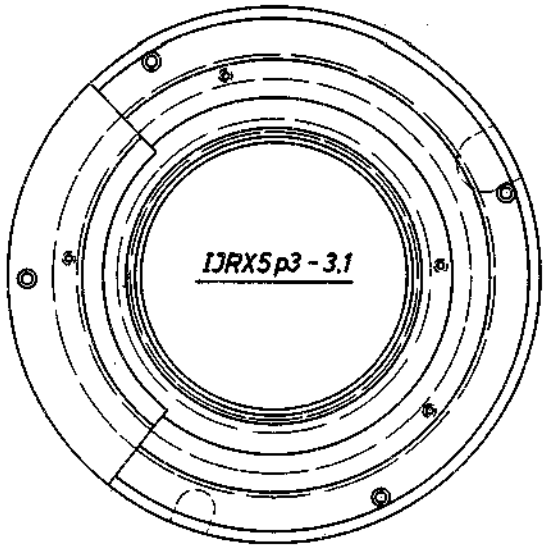


Änderungszustand dieses Blattes

Änd. Nr.	Lfd. Nr.	Tag u. Name	Änd. Nr.	Lfd. Nr.	Tag u. Name	Änd. Nr.	Lfd. Nr.	Tag u. Name
2950	2, 3	2. 9. 63						
2963	5, 6	" " "						
3074	8	" " "						
3340	10	" " "						

Alfred Gauthier G. m. b. H. Calmbach a. d. Enz	PRONTOR-PRESS IJRX5 p3 zu Modell IJRX5p	Geänderte Teile to model IJRX5p Changed parts	Liste besteht aus Blatt ..... Blatt Nr. 2 Gepr. ..... Gefertigt: 2.9.63

Lfd.Nr.	Teil Nr.:	Teilbenennung:	Teil:
1			
	Änderung Nr. 3341 / Change Nr. 3341		
2	IJRX5p - U31 siehe Mod. IJRX5p Änd.-Bl. 2	Antriebring an Stelle v. IJRX5-U31.1	
	see model IJRX5p change sheet 2	drive ring inst of IJRX5 - U31.1	
3	IJRX5p - 61 siehe Mod. IJRX5p Änd.-Bl. 2	Sektor an Stelle v. IJRX5-61	
	see model IJRX5p change sheet 2	shutter blade inst. of IJRX5-61	
4	IJRX5p - 130 siehe Mod. IJRX5p Bl. 4	Sektorenringschr. an Stelle v. 1817-30-6400	
	see model IJRX5p Bl. 4	shutter blade ring screw inst. of 1817-30-6400	
5			
	Änderung Nr. 3463 / Change Nr. 3463		
6	IJRX5p3-3.1	Boden an Stelle v. IJRX5p3-3	
		bottom inst. of IJRX5p3-3	
7			
8			
9			
10			



Änderungszustand dieses Blattes

Änd. Nr.	Lfd. Nr.	Tag u. Name	Änd. Nr.	Lfd. Nr.	Tag u. Name	Änd. Nr.	Lfd. Nr.	Tag u. Name
3341	2, 3, 4	2.9.63						
3463	6	" " "						